CRS Report for Congress

Homeland Emergency Preparedness and the National Exercise Program: Background, Policy Implications, and Issues for Congress

November 10, 2008

R. Eric Petersen, Coordinator and Bruce R. Lindsay Government and Finance Division

Lawrence Kapp Foreign Affairs, Defense, and Trade Division

Edward C. Liu; David Randall Peterman American Law Division; Resources, Science, and Industry Division



maintaining the data needed, and c including suggestions for reducing	lection of information is estimated to ompleting and reviewing the collect this burden, to Washington Headqu uld be aware that notwithstanding an DMB control number.	ion of information. Send comments arters Services, Directorate for Info	regarding this burden estimate ormation Operations and Reports	or any other aspect of the 1215 Jefferson Davis	nis collection of information, Highway, Suite 1204, Arlington	
1. REPORT DATE 10 NOV 2008		2. REPORT TYPE		3. DATES COVE 00-00-2008	RED 3 to 00-00-2008	
4. TITLE AND SUBTITLE				5a. CONTRACT NUMBER		
Homeland Emergency Preparedness and the National Exercise Program: Background, Policy Implications, and Issues for Congress 6. AUTHOR(S)				5b. GRANT NUMBER		
				5c. PROGRAM ELEMENT NUMBER		
				5d. PROJECT NUMBER		
				5e. TASK NUMBER		
				5f. WORK UNIT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Congressional Research Service, Library of Congress, 101 Independence Ave SE, Washington, DC, 20540-750				8. PERFORMING ORGANIZATION REPORT NUMBER		
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)		
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)		
12. DISTRIBUTION/AVAIL Approved for publ	ABILITY STATEMENT ic release; distributi	on unlimited				
13. SUPPLEMENTARY NO	OTES					
14. ABSTRACT						
15. SUBJECT TERMS						
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON	
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified	Same as Report (SAR)	53		

Report Documentation Page

Form Approved OMB No. 0704-0188

Homeland Emergency Preparedness and the National Exercise Program: Background, Policy Implications, and Issues for Congress

Summary

An emergency preparedness and response program provides resources and support to individuals and communities that might be affected by a broad range of disruptive incidents. These incidents may be caused by natural phenomena such as severe weather, fires, earthquakes, tsunamis, or disease outbreaks. Incidents might result from human activity as well, and could include accidents, criminal acts, terrorism, or other attacks. Concerns have been raised whether current preparedness and response policies and capacities are sufficient.

The effectiveness of preparedness doctrine may be demonstrated through responses to real incidents, or through exercises that practice and refine responses to a variety of potential disruptions. Exercises might demonstrate that responders have the capacity to respond effectively to an incident, or identify areas in which improvement is necessary. Lessons learned from an exercise may provide insights to guide future planning for securing the nation against terrorist attacks, disasters, and other emergencies. More broadly, emergency preparedness exercise programs may provide insights about the efficacy of the government policies establishing responsibilities within agencies, and whether those policies, organizational structures, and processes adequately ensure the safety and security of public institutions, critical infrastructures, and American citizens.

Current homeland emergency preparedness exercises, carried out through authorities that created the National Exercise Program (NEP), evaluate and adapt an integrated, interagency federal, state, territorial, local, and private sector capability to prevent terrorist attacks, and to rapidly and effectively respond to, and recover from, any terrorist attack or major disaster that occurs. This report, which will be updated as warranted, provides an overview of emergency preparedness authorities and guidance; development and management of the NEP; and current exercise planning, scheduling, and evaluation processes. Additionally, it provides analysis of national preparedness policy issues and exercise operations issues that Congress might wish to consider. Legal authorities to conduct national level exercises and preparedness exercises in general are provided in **Appendix A**. Since homeland preparedness activities are typically addressed by planners and practitioners who use specialized terms and abbreviations, **Appendix B** lists all acronyms used in this report together with their meaning.

Contents

Policy Background	1
Emergency Preparedness Authorities and Guidance	3
Post-Katrina Emergency Management Reform Act	
E.O. 12656	
HSPD-8	
Preparedness Guidance	
Toward a "National" Exercise Program	
National Exercise Program	8
NEP Management and Coordination	
NEP Requirements for Federal Executive Agencies	
NEP Exercises	
NEP Exercise Categories	. 13
Exercise Scheduling	
DOD Participation in the National Exercise Program	. 15
Role of DOD in NEP Events	
National Guard Participation	. 17
Exercise Development and Implementation Guidance	. 18
Exercise Planning: The HSEEP Method, Volume II	
Exercise Evaluation: The HSEEP Method, Volume III	
DOD Exercise Evaluation	. 24
National Guard Exercise Evaluation	. 25
Discussion and Analysis	. 25
National Preparedness Policy	. 27
Implementing Preparedness Exercise Programs: Which Authority? .	. 27
Implementing Preparedness Exercise Programs: Which Officials? .	
State, Territorial, Local, and Tribal Participation in the NEP	
Private Sector Participation	. 30
Evaluating NEP Progress	
National Exercise Simulation Center	
Communicating Preparedness Policy	
Congressional Interest	
Exercise Findings Issues	
Surge Capacity	
Interstate Movement of Commercial Emergency Response Vehicles	
Exercise Operations	
Exercise Realism	
No-Notice Exercises	
Scale and Scope of Exercises	
Exercise Fatigue	
Evaluating Exercises	
How "National" Is the NEP?	
NEP Opportunity Costs for Existing Agency Exercise Activities	. 40

Appendix A. National Level Preparedness Exercise Mandates
Appendix B. Acronym Glossary
List of Tables
Table 1. Express Mandates to Conduct "National Level Preparedness Exercises"

Homeland Emergency Preparedness and the National Exercise Program: Background, Policy Implications, and Issues for Congress

Policy Background¹

An emergency preparedness and response program provides resources and support to individuals and communities that might be affected by a broad range of disruptive incidents. These incidents may be caused by natural phenomena such as severe weather, fires, earthquakes, tsunamis, or disease outbreaks. Incidents might result from human activity as well, and could include accidents, criminal acts, terrorism, or other attacks. The scope of an incident could vary from a highly localized disruption to a regional or national catastrophe. The duration of response and recovery operations may be as short as a few days, or last for years. Federal, state, territorial, local, and tribal levels of governments, as well as private sector actors, could respond to an incident, either through on-scene response, or the provision of resources and support. Multiple agencies within each level of government are likely to contribute to a response, particularly when confronted with a catastrophic incident.

Concerns have been raised whether current preparedness and response policies and capacities are sufficient.² Broadly, the effectiveness of preparedness doctrine may be demonstrated through responses to real incidents,³ or through exercises that

¹ This report is based in part on materials prepared at the request of the Senate Committee on Homeland Security and Governmental Affairs, which the committee released for general distribution to Congress. William M. Knight, formerly National Defense Fellow in the Foreign Defense and Trade Division, authored sections of this report. Jennifer Manning, Information Research Specialist in the Knowledge Services Group, provided research support. William J. Krouse, Specialist in Domestic Security and Crime Policy, Domestic Social Policy Division, provided technical assistance.

² See Christine E. Wormuth and Anne Witkowsky, *Managing the Next Domestic Catastrophe: Ready (Or Not)?* (Washington: Center for Strategic and International Studies, 2008), available at [http://www.csis.org/media/csis/pubs/080909_wormuth_managingcatastrophe_web.pdf].

³ As with exercises, an incident might demonstrate the level of preparedness of federal, state, territorial, local, or tribal responders, and provide an opportunity for those responders to refine their actions based on their experiences. See for example, U.S. Senate, Committee on Homeland Security and Governmental Affairs, *Hurricane Katrina: A Nation Still Unprepared*, 109th Cong., 2nd sess., S.Rept. 109-322 (Washington: GPO, 2006); Monica Giovachino, Elizabeth Myrus, Dawn Nebelkpof and Eric Trabert, *Hurricanes Frances and Ivan: Improving the Delivery of HHS and ESF#8 Support* (Alexandria, VA; CNA (continued...)

practice and refine responses to a variety of potential disruptions. Exercises to test the potential efficacy of operational plans, civil assistance, or domestic emergency management response have long been a component of military training and civilian domestic preparedness efforts. Numerous exercises at the national, state, territorial, local, and tribal levels of government, as well as by the private sector, are carried out almost daily.⁴ Among potential benefits, exercises might identify deficiencies in response plans that can be addressed before an incident occurs. Specifically, exercises might be employed to

- validate the effectiveness of response plans for various kinds of incidents or emergencies;
- identify or refine response capacities of federal, state, territorial, local, tribal government and private sector entities;
- assure participation of senior government leaders to familiarize them with the preparedness functions of their positions;
- integrate civilian homeland security response with military homeland defense and support to civil authority missions;
- permit personnel from various federal agencies to become acquainted with the other, and with their counterpart officials in state, territorial, local, and tribal government, so as to enhance coordination and cooperation;
- test and evaluate knowledge and training of exercise participants;⁵
- evaluate response, communications, and coordination activities of emergency response organizations who are likely to be first on the scene of an incident; and
- assess the utility of evaluative metrics, or help observers identify or develop appropriate evaluative criteria.

Exercises might demonstrate that responders have the capacity to respond effectively to an incident, or identify areas in which improvement is necessary. Lessons learned from an exercise may provide insights to guide future planning for securing the nation against terrorist attacks, disasters, and other emergencies. More broadly, emergency preparedness exercise programs may provide insights about the

Corporation, 2005), available at [http://oversight.house.gov/documents/20051209101110-81959.pdf]; Arlington County, Virginia, *Arlington County After-Action Report on the Response to the September 11 Terrorist Attack on the Pentagon*, available at [http://www.arlingtonva.us/departments/Fire/edu/about/FireEduAboutAfterReport.aspx]; and State of Colorado, Division of Emergency Management, *After Action Report: Holiday Blizzard 2006* (part 1), available at [http://www.dola.colorado.gov/dem/operations/aars/aar_blizzard1.pdf].

³ (...continued)

⁴ For September 2008, the National Exercise Schedule System (NEXS) listed 56 exercises and 75 conferences to prepare for future exercises to be carried out by federal, state, territorial, local, and tribal entities. NEXS does not list private sector activities, and may not include all preparedness exercises carried out by all levels of civilian government or the military.

⁵ Under current civilian doctrine, discussed below, exercises are a means of testing knowledge and training. Under military doctrine, exercises are a component of training.

efficacy of the government policies establishing responsibilities within agencies, and whether those policies, organizational structures, and processes adequately ensure the safety and security of public institutions, critical infrastructures, and American citizens.

Current homeland emergency preparedness exercises, carried out through authorities that created the National Exercise Program (NEP), attempt to build an integrated, interagency federal, state, territorial, local, and private sector capability to prevent terrorist attacks, and to rapidly and effectively respond to, and recover from, any terrorist attack or major disaster that occurs. This report provides an overview of emergency preparedness authorities and guidance; development and management of the NEP; and current exercise planning, scheduling, and evaluation processes. Additionally, it provides analysis of national preparedness policy issues and exercise operations issues that Congress might consider. Legal authorities to conduct national-level exercises and preparedness exercises in general are provided in **Appendix A**. Since homeland preparedness activities are typically addressed by planners and practitioners who use specialized terms and abbreviations, **Appendix B** lists all acronyms used in this report together with their meaning.

Emergency Preparedness Authorities and Guidance

Current national emergency preparedness doctrine has developed over time, pursuant to statute and various executive directives.⁶ Among the authorities governing preparedness exercises are the following: The Post-Katrina Emergency Management Reform Act of 2006⁷; Executive Order (E.O.) 12656, Assignment of Emergency Preparedness Responsibilities; and Homeland Security Presidential Directive (HSPD) 8 on national preparedness.⁸

Post-Katrina Emergency Management Reform Act. The Post-Katrina Emergency Management Reform Act requires the Administrator of the Federal Emergency Management Agency (FEMA), "in coordination with the heads of appropriate federal agencies, the National Council on Disability, and the National Advisory Council" to "carry out a national exercise program to test and evaluate the national preparedness goal, National Incident Management System, National Response Plan (NRP), and other related plans and strategies." The Post-Katrina Emergency Management Reform Act national exercise program is mandated to be

⁶ **Appendix A** provides lists of specific mandates to conduct "national level preparedness exercises," and general mandates to conduct exercises.

⁷ Post-Katrina Emergency Management Reform Act of 2006, Oct. 4, 2006, P.L. 109-295, 120 Stat. 1394, et seq.

⁸ The text of HSPD 8 is available at [http://www.whitehouse.gov/news/releases/2003/12/20031217-6.html].

⁹ The NRP was replaced by the National Response Framework (NRF) in January 2008.

¹⁰ P.L. 109-295, sec. 648(b), 6 U.S.C. 748.

- as realistic as practicable, based on current risk assessments, credible threats, vulnerabilities, and consequences;
- designed to stress the national preparedness system;
- designed to simulate the partial or complete incapacitation of a state, territorial, local, or tribal government;
- carried out with a limited degree of notice to exercise players regarding exercise timing and details;
- designed to provide for systematic evaluation of readiness; and
- designed to address the unique requirements of populations with special needs. 11

At least every two years the Administrator is required to carry out national exercises "to test and evaluate the capability of federal, state, territorial, local, and tribal governments to detect, disrupt, and prevent threatened or actual catastrophic acts of terrorism, especially those involving weapons of mass destruction ... and to test and evaluate the readiness of Federal, State, territorial, local, and tribal governments to respond and recover in a coordinated and unified manner to catastrophic incidents."¹²

E.O. 12656. E.O. 12656 was issued November 18, 1988, by President Ronald Reagan. It assigns national security emergency preparedness responsibilities to federal departments and agencies; establishes a national security emergency exercise program; and directs FEMA to coordinate the planning, conduct, and evaluation of national security emergency exercises. E.O.12656 defines a national security emergency as "any occurrence, including natural disaster, military attack, technological emergency, or other emergency, that seriously degrades or seriously threatens the national security of the United States."

HSPD-8. HSPD-8 requires the Secretary of Homeland Security, "in coordination with other appropriate federal departments and agencies" to "establish a national program and a multi-year planning system to conduct homeland security preparedness-related exercises that reinforces identified training standards, provides for evaluation of readiness, and supports the national preparedness goal." The

¹¹ The Administrator is also required to provide assistance to state, territorial, local, and tribal governments with the design, implementation, and evaluation of exercises.

¹² P.L. 109-295, sec. 648(b), 6 U.S.C. 748.

^{13 53} FR 47491; Nov. 23, 1988.

¹⁴ While the order defines "national security emergency" broadly, subsequent language excludes "those natural disasters, technological emergencies, or other emergencies, the alleviation of which is normally the responsibility of individuals, the private sector, volunteer organizations, State and local governments, and Federal departments and agencies unless such situations also constitute a national security emergency."

¹⁵ The National Preparedness Goal, a forerunner of the National Preparedness Guidelines, was released by DHS on an interim basis in 2005 to "guide federal departments and agencies, state, territorial, local and tribal officials, the private sector, non-government organizations and the public in determining how to most effectively and efficiently (continued...)

program is to be carried out in collaboration with state and local governments and private sector entities. Federal departments and agencies that conduct national homeland security preparedness-related exercises are required to "participate in a collaborative, interagency process to designate such exercises on a consensus basis and create a master exercise calendar." The directive mandates that the Secretary of Homeland Security "develop a multi-year national homeland security preparedness-related exercise plan and submit the plan to the President through the Homeland Security Council (HSC) for review and approval."

Preparedness Guidance. Guidance materials and processes to assist the implementation of national preparedness authorities are overseen at the federal level by the Department of Homeland Security (DHS). These tools include the National Response Framework (NRF), the National Incident Management System (NIMS), and the National Preparedness Guidelines (NPG). NRF provides guidance for conducting all-hazards emergency response. The framework describes specific statutory and executive authorities, and what DHS describes as "best practices" for managing incidents that range from the serious but purely local, to large-scale terrorist attacks or catastrophic natural disasters. DHS says that NRF focuses particularly on how the federal government is organized to support communities and states in catastrophic incidents. 16 According to DHS, NRF builds upon NIMS, an incident management process that was reportedly developed so responders from different jurisdictions and disciplines¹⁷ could work together to respond to natural disasters and other emergencies, including acts of terrorism. NIMS utilizes "a unified approach to incident management; standard command and management structures; and emphasis on preparedness, mutual aid and resource management." ¹⁸ NPG provides a means to define all hazards preparedness; organize and synchronize efforts to strengthen national preparedness; guide national investments in national preparedness; incorporate lessons learned from past disasters into national preparedness priorities; and establish readiness metrics and a system for assessing the

^{15 (...}continued)

strengthen preparedness for terrorist attacks, major disasters, and other emergencies." Among the priorities identified by the goal were the implementation of the National Incident Management System (NIMS), and the National Response Plan (NRP), a forerunner of the NRF. See DHS, "Department of Homeland Security Releases Interim National Preparedness Goal," press release, Apr. 1, 2005, available at [http://www.dhs.gov/xnews/releases/press_release_0648.shtm]; and Ibid., "HSPD-8 Overview," available at [http://www.ojp.usdoj.gov/odp/assessments/hspd8.htm]. The NPG superceded the interim goal in 2007. For historical background, see CRS Report RL32803, *The National Preparedness System: Issues in the 109th Congress*, by Keith Bea, available upon request.

¹⁶ U.S. Department of Homeland Security, National Response Framework, Jan. 2008, p. 1, available at [http://www.fema.gov/pdf/emergency/nrf/nrf-core.pdf].

¹⁷ "Disciplines" in this context appears to mean different types of responders, including police, fire, rescue and medical professionals, among others.

¹⁸ Federal Emergency Management Agency, National Integration Center (NIC) Incident Management Systems Division home page, available at [http://www.fema.gov/emergency/nims/index.shtm].

Nation's overall preparedness capability to respond to major events, especially those involving acts of terrorism.¹⁹

Toward a "National" Exercise Program

While training and exercises are longstanding components of government preparedness efforts, ²⁰ a program of national exercises that attempts to coordinate and synchronize federal exercise activities, and incorporate state, territorial, local, and tribal governments and the private sector, arguably has emerged only in the past decade. A product of congressional and executive branch mandates, the program appears to have been motivated in part by perceived shortcomings in previous exercise efforts as well as deficiencies perceived in response to actual incidents.

¹⁹ See Department of Homeland Security, *National Preparedness Guidelines*, Sept. 2007, available at [http://www.dhs.gov/xlibrary/assets/National_Preparedness_Guidelines.pdf], p. 1.

²⁰ The United States has used military exercises to provide training and capability evaluations since the earliest days of the republic. A limited survey of civilian preparedness efforts suggests that they resulted from a number of factors, including perceived threats, and reactions to incidents that required emergency response. Following World War II (1939-1946), preparedness evolved from a predominantly military concept into a joint military and civilian effort to secure the country's defenses and protect U.S. citizens. Activities to prevent or mitigate the consequences of natural disasters, resource crises, economic disruption, industrial or transportation accidents, and "certain forms of terrorist activity" were developed in response to the perceived threats of the Cold War (1945-1991) between the United States and the Soviet Union, and their respective allies. Disaster preparedness involved the advance planning for coordination of public and private resources among federal, state, territorial, local and private agencies and actors. Response capacity was based on the provision of those resources in emergency circumstances "where existing resources are unlikely to be sufficient to cope with the requirements imposed by disaster." See U.S. Congress, Joint Committee on Defense Production, Civil Preparedness Review: Part I, Emergency Preparedness and Industrial Mobilization 95th Cong., 1st sess. (Washington: GPO, 1977), pp. vii-10; quotes, pp 3, 4. Systematic attention to exercises was not identified in the years prior to the 1970s. In 1979, FEMA established a National Security Emergency Exercise program, featuring large-scale exercises involving many federal agencies. Following a partial meltdown of a nuclear power plant at Three Mile Island, Pennsylvania, FEMA was assigned responsibility for radiological incident preparedness; the agency conducted hundreds of Radiological Emergency Preparedness (REP) exercises between 1979 and 2000, see Department of Justice (DOJ), and FEMA Press Release, "Justice Department, Federal Emergency Management Agency to Conduct Domestic Counterterrorism Exercises," Apr. 27, 2000; and FEMA, "FEMA History," available at [http://www.fema.gov/about/history.shtm]. In the aftermath of the bombing of the Alfred P Murrah federal building in Oklahoma City in 1995, Congress passed the Defense Against Weapons of Mass Destruction Act of 1996 (P.L. 104-201, Title 14, 110 Stat. 2714, 50 U.S.C. 2301) to enhance domestic preparedness to respond to a terrorist attack. The act required increased capability to respond to incidents involving nuclear, biological, chemical, and radiological weapons of mass destruction (WMD), and required the Department of Defense (DOD) to provide training and advice to civilian agencies at the federal, state and local levels regarding response. The history of preparedness capacity building, training and exercises arguably lay the foundation for FEMA and DHS efforts to prepare for potential threats in more contemporary exercises, while the focus on interagency coordination and cooperation at the federal level integrates military and civilian response capacity.

Impetus for an exercise of national scope came in 1998. The Senate Committee on Appropriations, noting that "few of the top officials of agencies have ever fully participated" in ongoing preparedness exercises, directed in report language "that an exercise be conducted in fiscal year 1999 with the participation of all key personnel who would participate in the consequence management of ... an actual terrorist event." The result was the Top Officials (TOPOFF) exercise, the first of what was to be a series of four full-scale simulation exercises. The series appears to have been a de facto national program of exercises held biennially to "assess the nation's crisis and consequence management capacity under extraordinary conditions." TOPOFF exercises enabled high level federal officials and relevant participants to "practice different courses of action, gain and maintain situational awareness, and assemble appropriate resources." 23

TOPOFF exercise scenarios attempted to address several objectives, and typically included several incidents occurring at multiple geographic locations. First, they were designed to reveal potential emergency response vulnerabilities so that any identified deficiencies could be addressed before an actual incident occurred. Second, TOPOFFs were used to observe how national, state, and local levels of government, as well as public and private organizations, might interact and coordinate their emergency responses. Finally, it has been pointed out that TOPOFFs might also have served other, more subtle objectives, including assuring the public of the ability of the government to respond to the results of attacks, and to communicate a message of deterrence to potential enemies.²⁴

²¹ United States Senate, *Departments of Commerce, Justice, and State, the Judiciary, and Related Agencies Appropriation Bill, 1999*, report to accompany S. 2260, 105th Cong., 2nd sess., S.Rept. 105-235 (Washington: GPO, 1998), p.14.

²² TOPOFF 2000, May 17-24, 2000, simulated a biological attack in Colorado and New Hampshire. TOPOFF 2, May 12-16, 2003, simulated radiological dispersal device (RDD) and an outbreak of pneumonic plague. The exercise included pre-exercise intelligence play, a cyber-attack, and credible terrorism threats against other locations. The venues in the exercise included Washington and Illinois. TOPOFF 3, April 4-8, 2005, was a large-scale, multipoint terrorist attack using biological and chemical weapons. The venues in the exercise included Connecticut, New Jersey, the United Kingdom, and Canada. TOPOFF 4, October 15-19, 2007, simulated the detonation of an RDD near a power plant. The venues included Oregon, Arizona, and Guam.

²³ DOJ and FEMA, "Justice Department, Federal Emergency Management Agency to Conduct Domestic Counterterrorism Exercises," Apr. 27, 2000.

²⁴ Christina W. Erickson and Bethany A. Barratt, "Prudence or Panic? Preparedness Exercises, Counterterror Mobilization, and Media Coverage - Dark Winter, TOPOFF 1 and 2," *Journal of Homeland Security and Emergency Management*, vol. 1, issue 4 (2004), pp. 1-2.

National Exercise Program²⁵

As the Post-Katrina Emergency Management Reform Act was considered and enacted, the White House was developing policy guidance to implement a national exercise program. In briefings provided to various audiences in 2006 and 2007, the Department of Defense (DOD) and DHS referred to HSC input and policy guidance on national exercise planning. Principal documents in this development were reported in those briefings to include a national exercise program charter and implementation plan. According to a DOD presentation, more than 100 military exercises were to be synchronized in FY2007 with exercises run under the auspices of DHS.²⁷

A White House memorandum entitled "National Exercise Program" and identified by many observers as the "NEP charter," outlines

a program for the coordination of all exercises conducted pursuant to strategies or plans prepared pursuant to Presidential direction. The program will include processes to examine and improve the Nation's ability to prevent, prepare for, respond to and recover from terrorist attacks, major disasters and other emergencies.²⁸

The charter requires

officers of the United States Government (USG) to: (a) exercise their responsibilities under the National Response Plan and other strategies, as appropriate; (b) examine emerging policy issues through the conduct of exercises in a comprehensive manner on a routine basis; (c) incorporate current threat and vulnerability assessments into the exercise objectives and planning effort; (d) develop a corrective action process to ensure lessons from exercises are either sustained or improved as appropriate; and (e) achieve national unity among appropriate Federal, State, local, private sector, and appropriate partner nation entities.²⁹

²⁵ This section and related sections that follow are based on Homeland Security Council, *National Exercise Program Implementation Plan*, June 20, 2008 (hereafter, NEP implementation plan), and other sources as indicated.

²⁶ DOD-based exercises include components of the Chairman's (of the Joint Chiefs of Staff) Exercise Program (CEP) and the Joint Exercise Program (JEP).

²⁷ See Department of Homeland Security, "National Exercise Program," presentation at the DOD Worldwide Joint Training and Scheduling Conference 2007-1 (WJTSC 07-1), Mar. 8, 2007; and Department of Defense, Joint Staff, "Exercise Synchronization Working Group," presentation at the DOD Worldwide Joint Training and Scheduling Conference 2006-2 (WJTSC 06-1), Oct. 2, 2006. Both presentations are available from the authors upon request.

²⁸ White House, "National Exercise Program" (hereafter NEP charter) undated, p.3, available from the authors upon request.

²⁹ Ibid.

Citing paragraph 18 of HSPD 8 and section 648 of the Post-Katrina Emergency Management Reform Act, the National Exercise Program Implementation Plan (NEP implementation plan), issued in June 2008, formally establishes the NEP "under the leadership of the Secretary of Homeland Security." According to the plan, the "principal focus of the NEP is to coordinate, design and conduct a program of exercises designed for the participation of Federal department and agency principals and other key officials...." The NEP implementation plan states that the "DHS-led program required pursuant to" the Post-Katrina Emergency Management Reform Act and HSPD-8 "has been renamed the Homeland Security Exercise and Evaluation Program (HSEEP)," [hereafter HSEEP exercise program]³¹ with the NEP serving as "the overarching exercise program directed at principals" of federal agencies and other officials "...to ensure the USG has a single, comprehensive exercise program."³² The NEP is used to examine and evaluate national policy issues and guidance, including the NPG, NIMS, NRF, and other related plans and strategies to provide domestic incident management, "either for terrorism or non-terrorist catastrophic events." According to the implementation plan, the NEP incorporates exercise planning, design and evaluation methods and various federal department and agency exercise programs:

The NEP incorporates HSEEP [exercise program] as well as other department and agency exercise programs, but gives a collective voice to the interagency exercise community in making the best use of this well-resourced DHS program in order to satisfy USG [U.S. Government]-wide requirements including providing assistance to state, local and tribal governments with the design implementation and evaluation of exercises. All departments, agencies, or offices responsible for coordinating exercises related to Presidentially-directed strategies and plans shall utilize the NEP as the means of coordination and conduct of such exercises. All departments, agencies, or offices shall plan and budget appropriately to support the exercise planning cycle and exercise participation.³³

NEP Management and Coordination. Within the White House, the NEP is managed through an interagency process overseen by the Homeland Security Council and the National Security Council (NSC). Day-to-day coordination of the program is carried out by the White House Domestic Readiness Group ³⁴ exercise and

³⁰ NEP implementation plan, p. 1.

³¹ It appears that the HSEEP exercise program, incorporating the Post-Katrina Emergency Management Reform Act and HSPD-8 exercise programs as described in the NEP implementation plan, is different from the longstanding HSEEP exercise design, development, conduct, evaluation, and improvement planning methodology (the HSEEP method) maintained by FEMA, and discussed below.

³² NEP implementation plan, p. 1.

³³ NEP implementation plan, p. 3.

³⁴ The status and membership of the Domestic Readiness Group could not be determined. In the NRF, it is described as "an interagency body convened on a regular basis to develop and coordinate preparedness, response, and incident management policy. This group (continued...)

evaluation policy coordinating subcommittee (DRG E&E Sub-PCC). A steering committee is responsible for staff-level coordination of the NEP. The steering committee also frames issues and recommendations for the DRG E&E Sub-PCC on exercise themes, goals, objectives, scheduling and corrective actions. The steering committee is chaired and facilitated by FEMA's National Exercise Division, with staff support provided by agencies that sit on the steering committee. HSC, NSC, and the Office of Management and Budget (OMB) participate in the steering committee in a non-voting, oversight capacity.

NEP Requirements for Federal Executive Agencies. The strategic objectives of the NEP charter are to

1) Exercise senior USG officials; 2) Examine and evaluate emerging national level policy issues; 3) Practice efforts to prevent, prepare for, respond to and recover from terrorist attacks, major disasters, and other emergencies in an integrated fashion from the federal level down to state, local, and private sector level; and 4) Identify and correct national-level issues, while avoiding repetition of mistakes.³⁷

Generally, the NEP implementation plan requires all federal executive agencies to

- provide resource and budget support for the planning and conduct of certain NEP exercises unless specifically relieved of this requirement by both the Assistant to the President for National Security Affairs (APNSA) and the Assistant to the President for Homeland Security and Counterterrorism (APHS/CT);
- provide principal- or deputy-level support to national and principal level exercises;

evaluates various policy issues of interagency importance regarding domestic preparedness and incident management and makes recommendations to senior levels of the policymaking structure for decision. During an incident, the Domestic Readiness Group may be convened by DHS to evaluate relevant interagency policy issues regarding response and develop recommendations as may be required." No specific membership was identified. See DHS, *National Response Framework*, p. 55.

³⁴ (...continued)

³⁵ The National Exercise Division is a part of FEMA's National Preparedness Directorate. Department of Homeland Security/FEMA, National Preparedness Directorate, briefing for the Committee on Homeland Security and Governmental Affairs, June 12, 2008 (hereafter DHS/FEMA briefing).

³⁶ Members of the steering committee include DHS Office of Operations Coordination; DHS/FEMA Disaster Operations; DOD, Office of the Secretary of Defense; DOD, Joint Staff; Department of Justice; Federal Bureau of Investigation; Department of State; Office of the Director of National Intelligence, Department of Energy; Department of Transportation; and the Department of Health and Human Services. Up to two additional members from the DRG E&E Sub-PCC, currently the Department of Treasury and the Environmental Protection Agency, may serve one-year terms, on a rotating basis.

³⁷ NEP charter, p.3.

- participate in the planning and conduct of certain DHS- led NEP national and regional simulation requirements;
- designate an exercise and evaluation point of contact (POC) for coordination with the NEP ESC;
- submit annually to the NEP ESC a prioritized list of exercise objectives and capabilities they wish to exercise and evaluate;
- maintain a corrective action program (CAP) that can generate input for, and track assignments from, an interagency NEP corrective action program, described below;
- report their sponsored exercise activities to a national exercise schedule:
- have an exercise participation decision process that accords priority to certain NEP events; and
- develop and report on output, outcome and efficiency measures to guide evaluation of exercise and related training programs as they relate to the NEP. The results of the report shall be submitted to OMB concurrently with the agencies' annual budget submissions.

The plan also assigns specific responsibilities to a number of entities and officials.³⁸

NEP Corrective Action Program. The NEP implementation plan requires the establishment of a corrective action program (NEP CAP), administered by DHS in support of HSC and NSC, to provide a government-wide process for identifying, assigning, and tracking remediation of interagency issues identified through exercises.

NEP Exercises

The NEP implementation plan describes three broad categories of exercises — national level exercise (NLE), principal level exercises (PLE), and NEP classified exercises.

National Level Exercise. The NEP implementation plan describes an NLE as the single, annual operations-based exercise focused on White House directed, government-wide strategy and policy-related issues. An NLE requires the participation of all appropriate department and agency principals or their deputies, other key officials, ³⁹ and all related staff, operations and facilities at national, regional

³⁸ Entities and officials assigned specific management, oversight, or programmatic responsibilities in the NEP implementation plan include APHS/CT; APNSA; DOD; DHS; Office of Director of National Intelligence; Department of State; DRG E&E Sub-PCC; ESC; OMB; and Tier I or Tier II exercise steering committees tasked with developing and managing specific exercises.

³⁹ According to the NEP implementation plan, other key officials include the Chief of Staff to the President, APNSA, APHS/CT, the Assistant to the President for Domestic Policy, the Chairman of the Joint Chiefs of Staff (CJCS), and the Director of National Intelligence (DNI).

and local levels.⁴⁰ NLEs examine the preparation of the government and its officers and other officials to prevent, respond to, or recover from threatened or actual terrorist attacks, particularly those involving weapons of mass destruction (WMD), major disasters, and other emergencies. NLEs address strategic- and policy- level objectives intended to challenge the national preparedness of the United States. Federal executive agency exercise planning activities that support national priorities and objectives, specified in various Presidential directives, may be incorporated into NLEs. An NLE may involve all levels of federal, state, and local authorities and may involve critical private-sector entities, or international partners, as appropriate.

NLE scenarios are based on the response requirements of one of 15 National Planning Scenarios (NPS),⁴¹ and one of the components of the NPG. The NPS are high-consequence threat scenarios of both potential terrorist attacks and natural disasters that could necessitate emergency response. DHS argues that they are designed to focus contingency planning for homeland security preparedness work at all levels of government and the private sector.⁴²

Principal Level Exercise. PLEs address emerging threats and issues requiring senior-level attention, and establish and clarify roles and responsibilities, as well as strategy and policy, for government-wide activities. The NEP includes four discussion-based PLEs per year, and requires the participation of all appropriate department and agency principals or their deputies. One PLE serves as a preparatory event for the annual NLE. The topic for one of the PLEs is not decided until the year it is conducted. DHS conducts PLEs in consultation with HSC and NSC staffs. DOD provides technical assistance, while "all other departments and agencies" provide "appropriate assistance."

NEP Classified Exercises. Some aspects of federal executive branch efforts to prevent and respond to threatened or actual terrorist attacks, major disasters, and other emergencies are national security classified, restricted to select executive agencies, and must be exercised and evaluated within the context of ongoing exercise prevention or response operations. Classified exercise activities are incorporated into some NEP exercises. The NEP implementation plan notes that classified exercises "should be a logical component of the exercise scenario and aligned with exercise objectives."

⁴⁰ The NEP implementation plan indicates that an NLE may be a functional exercise (FE), a full-scale exercise (FSE), or a combination of both, but does not define FE or FSE. Exercise types are identified in various DHS/FEMA guidelines. See "Exercise Development and Implementation Guidance," below.

⁴¹ The NPS include aerosol anthrax; blister agent; chlorine tank explosion; cyber attack; food contamination; foreign animal disease; improvised explosive device (IED); improvised nuclear device (IND); major earthquake; major hurricane; nerve agent; pandemic influenza (PI); plague; radiological dispersal device (RDD); and toxic industrial chemicals. See DHS, National Preparedness Guidelines, p. 31, available at [http://www.dhs.gov/xlibrary/assets/National Preparedness Guidelines.pdf].

⁴² DHS/ FEMA briefing, June 12, 2008.

NEP Exercise Categories. The NEP categorizes exercise activities into four tiers reflecting the priority for national and regional federal interagency participation. Exercises are assigned to tiers according to a consensus interagency judgment expressed in the DRG E&E Sub-PCC of how closely they align to government-wide strategic and policy priorities. The four tiers, numbered I through IV, are as follows:

Tier I. Tier I exercises include an annual NLE and four quarterly PLEs. The exercises are centered on White House directed, government-wide strategy and policy-related issues; federal executive agency participation is required. FEMA's National Exercise Division is the lead planning agent for the NEP Tier I exercises, unless otherwise stipulated by the Domestic Readiness Group.

Tier II. Tier II exercises include federal executive agency exercises that focus on government strategy, policy and procedural issues meriting priority for national and regional federal interagency participation. Tier II exercises may be carried out through the National Simulation Center, or as determined by a sponsoring agency's leadership. A federal executive agency that sponsors a Tier II exercise is responsible for leading the coordination, planning, conduct, and evaluation of the exercise. FEMA's National Exercise Division is responsible for coordinating federal, national interagency simulation of exercises. This may be accomplished through the National Simulation Center, or by coordinating federal regional simulation as required to support an exercise. The DRG E&E Sub-PCC shall recommend no more than three Tier II exercises each year for federal, national, and regional interagency participation.

Tier III. Tier III exercises include other federal exercises focused on regional plans, policies and procedures. The exercises may focus on operational, tactical, or organization-specific objectives that do not require broad interagency headquarters-level involvement to achieve their stated exercise or training objectives. Participation in Tier III exercises by national level assets is at the discretion of each federal executive agency. Tier II exercises take precedence over Tier III exercises in the event of resource conflicts.

Tier IV. Tier IV exercises are exercises in which state, territorial, local, or tribal governments and private sector entities are the primary audience or subject of evaluation.

Exercise Scheduling. The NEP implementation plan requires the development and annual revision of a five-year schedule of exercises by the Secretary of Homeland Security, in coordination with the principals of other relevant departments and agencies.⁴³ As part of an annual scheduling process, federal executive agencies may nominate an exercise for consideration as a Tier II exercise.

⁴³ Some presentations on the NEP have suggested that changes to an exercise theme or scenario should not be attempted within two years of an exercise, in order to allow exercise planners the opportunity to design the exercise. Since the first five-year NEP schedule commenced at the beginning of FY2007 (October, 2006), however, it has yet to be determined whether efforts to maintain the exercise schedule and NLE themes have been established or are being enforced.

The NEP implementation plan appears to be unclear whether participating agencies are required to fit their entire exercise programs into the NEP framework.⁴⁴ When they participate in NLEs, however, agencies are expected to shape their participation to fit the themes and schedules of NLE scenarios.⁴⁵ In a preliminary example of this approach, during NLE 1-08, a Tier I exercise, TOPOFF 4 ran simultaneously with DOD- and Department of Health and Human Services (HHS)- based exercises.⁴⁶ In NLE 2-08, a tier II exercise, two FEMA exercises, Eagle Horizon 08, designed to exercise the continuity of operations (COOP) capabilities of federal agencies in the National Capital Region (NCR), and Hurricane Prep 08, designed to test FEMA response to a hurricane, exercised under the same scenario. Both exercises incorporated some of the simulated intelligence materials established for three DOD conducted exercises held during NLE 2-08: Positive Response 08-2; Ardent Sentry 08; and Ultimate Caduceus 08.

Emergency management staff in DHS and DOD indicate that exercise activities carried out during FY2007 and FY2008 reflected a period of transition to the NEP. Scheduled and planned prior to the implementation of the National Exercise Schedule (NEXS) and NLE processes, the exercises were somewhat less unified in terms of exercise scenarios and objectives than those anticipated by the NEP. The individual exercise components of NLE 2-08 appear to have been carried out essentially independently by DHS and DOD components, and the extent of interactions of players from different agencies is unclear. On the other hand, some interagency coordination occurred at higher, more strategic levels. During the NLE 2-08 planning process, DOD and DHS held joint planning conferences. Further, DOD provided some logistical support to the DHS Eagle Horizon continuity exercise, which based its exercise control cell and some evaluation components at DOD's Joint Warfighting Center (JWFC).⁴⁷ Both agencies anticipate future NLEs will be carried out according to timing specified in the NEP implementation plan, based on common exercise scenarios and coordinated response activities.⁴⁸

⁴⁴ At various points, the plan appears to provide ambiguous, potentially confusing guidance: "The NEP is intended to provide a framework for prioritizing and focusing Federal exercise activities, without replacing any individual department or agency exercise program"(NEP implementation plan, p. 2); and "All departments and agencies shall have an have an exercise participation decision process that accords priority to NEP Tier I and Tier II events." (Ibid., p. 17). See "NEP and Existing Agency Exercise Activities," below.

⁴⁵ Department of Homeland Security, "National Exercise Program," Mar. 8, 2007.

⁴⁶ DHS said that during TOPOFF 4, "the U.S. Department of Health and Human Services (HHS) mobilized around emerging public health issues related to a radiological emergency, and the U.S. Department of Defense (DOD) ran concurrent exercises to address global terror threats." See "The TOPOFF 4 Full-Scale Exercise," available at [http://www.dhs.gov/xprepresp/training/gc_1179430526487.shtm]. The TOPOFF exercise series was terminated following TOPOFF 4. Future exercises that meet the requirements of the TOPOFF program will run as NLEs. DHS/FEMA briefing, June 12, 2008.

⁴⁷ See FEMA, "National Level Exercise (NLE) 2-08 Eagle Horizon 2008 (EH 08) Participant Briefing," May 7, 2008. Information on the JWFC is available at [http://www.jfcom.mil/about/abt_j7.htm].

⁴⁸ DHS/FEMA briefing, June 12, 2008; Department of Defense, Office of Secretary of (continued...)

DOD Participation in the National Exercise Program

Historically, military exercises have been designed, planned, executed, and evaluated primarily by the individual military services; but in recent decades there has been greater emphasis on joint exercises, which involve two or more services. DOD participation in the NEP will normally occur as a joint military exercise linked to an NEP event. Doctrine and guidance for the conduct of joint military exercises is contained in several key documents. Of particular importance are Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3500.01D, Joint Training Policy, which establishes policy for planning and conducting joint training (which includes exercises), and Chairman of the Joint Chiefs of Staff Manual (CJCSM) 3500.03B Joint Training Manual for the Armed Forces of the United States, which provides guidance to Combatant Commanders on implementing policies for planning and conducting joint training. While the military's joint doctrine differs somewhat from the HSEEP method, there are deep similarities between them because the latter was heavily influenced by the former.

Role of DOD in NEP Events. NEP events are intended to focus "principally on domestic incident management, either for terrorism or non-terrorist catastrophic events." In the event of such an incident, there are two principal areas in which DOD would play a significant role in the overall response: homeland defense operations and civil support operations. DOD defines homeland defense as "The protection of United States sovereignty, territory, domestic population, and critical defense infrastructure against external threats and aggression or other threats as directed by the President." Within the context of the NEP, this homeland defense capability might be exercised through scenarios that include a pending terrorist attack (for example, interdicting ships containing radiological material before they arrived at an American port, or intercepting an explosives-laden aircraft). DOD defines civil support as "Department of Defense support to US civil authorities for domestic emergencies, and for designated law enforcement and other activities." Civil support missions include assisting civil authorities in their response to manmade and natural disasters, supporting public health, and maintaining civil order. Within the

Defense (OSD), for staff of the Congressional Research Service (CRS), July 23, 2008 (hereafter OSD briefing); Department of Defense, National Guard Bureau (NGB) for CRS staff, August 5, 2008 (hereafter NGB briefing).

⁴⁸ (...continued)

⁴⁹ NEP implementation plan, p. 1.

⁵⁰ Joint Publication 1-02, Department of Defense Dictionary of Military and Associated Terms, as amended through August 26, 2008, available at [http://www.dtic.mil/doctrine/jel/new_pubs/jp1_02.pdf]. The definition of homeland defense is distinct from the definition of homeland security, which is defined as "a concerted national effort to prevent terrorist attacks within the United States; reduce America's vulnerability to terrorism, major disasters, and other emergencies; and minimize the damage and recover from attacks, major disasters, and other emergencies that occur." See also JP 3-27, Homeland Defense, July 12, 2007, available at [http://www.dtic.mil/doctrine/jel/new_pubs/jp3_27.pdf].

⁵¹ Joint Publication 1-02, Department of Defense Dictionary of Military and Associated Terms, as amended through August 26, 2008, available at [http://www.dtic.mil/doctrine/jel/new_pubs/jp1_02.pdf].

context of the NEP, DOD's civil support capability might be exercised through scenarios that include the national response to a completed terrorist attack or a catastrophic disaster (for example, assisting with medical evacuation of injured people, or providing personnel and equipment to conduct search and rescue missions).

At the policy level, DOD is directly involved in the ongoing development, coordination, and execution of the NEP.⁵² It has representatives from both the Office of the Secretary of Defense (OSD) and the Joint Staff (J7)⁵³ on the DRG E&E Sub-PCC, which makes recommendations on exercise priorities, schedules, and corrective action. DOD also has OSD and J7 representatives on the NEP ESC, which coordinates the NEP at the staff level. Twice a year, DOD conducts a Worldwide Joint Training and Scheduling Conference (WJTSC) which coordinates exercise plans and schedules from the Combatant Commands. The finalized results of these conferences are submitted in December of each year to DHS for inclusion in the National Exercise Schedule. In this manner, the timing of many large-scale DOD exercises has been synchronized with NEP generally, and particularly the NLEs.

At the operational level, DOD participates in NEP events primarily through U.S. Northern Command (USNORTHCOM) and the National Guard. USNORTHCOM is the DOD Combatant Command with primary responsibility for homeland defense and civil support operations in the United States (not including Hawaii, Puerto Rico, and U.S. territories).⁵⁴ For example, during NLE 1-08, USNORTHCOM and the North American Aerospace Defense Command (NORAD)⁵⁵ conducted Vigilant Shield 08 to test the ability of the military to conduct civil support operations in response to a scenario in which the main event, TOPOFF 4, was the explosion of

⁵² Much of the information in this paragraph was provided by the Joint Staff Legislative Affairs office by e-mail to CRS on May 28, 2008.

⁵³ J7 is the directorate responsible to the Joint Chiefs of Staff (JCS) for Operational Plans and Joint Force Development, and has responsibility for exercise development and evaluation.

Support operations within the assigned area of responsibility to defend, protect, and secure the United States and its interests. USNORTHCOM's area of responsibility includes air, land and sea approaches and encompasses the continental United States, Alaska, Canada, Mexico and the surrounding water out to approximately 500 nautical miles. It also includes the Gulf of Mexico and the Straits of Florida. The defense of Hawaii and U.S. territories and possessions in the Pacific is the responsibility of U.S. Pacific Command. The defense of Puerto Rico and the U.S. Virgin Islands is the responsibility of U.S. Southern Command. The commander of USNORTHCOM is responsible for theater security cooperation with Canada and Mexico." See "About NORTHCOM," available at [http://www.northcom.mil/About/index.html]. See also CRS Report RL34342, Homeland Security: Roles and Missions for United States Northern Command, by William Knight.

⁵⁵ NORAD is a bi-national U.S. and Canadian organization charged with air and maritime warning and airspace control. USNORTHCOM and NORAD are both commanded by the same individual; however, while NORAD and USNORTHCOM are collocated, they remain separate, but complementary entities. NORAD was established by treaty, and in May 2006, NORAD's maritime warning mission was added.

radiological dispersion devices in Guam, Oregon, and Arizona. As part of NLE 2-08, Ardent Sentry 08 tested DOD's ability to conduct civil support operations in response to terrorist attacks in the Pacific Northwest and a hurricane striking the mid-Atlantic states.⁵⁶

Other combatant commands may provide support to USNORTHCOM during an NEP event. For example, during NLE 2-08, U.S. Transportation Command (USTRANSCOM) supported Ardent Sentry by conducting exercise Ultimate Caduceus. This exercise was designed to demonstrate and assess USTRANSCOM's Joint Task Force - Port Opening⁵⁷ capability to respond to mass casualty scenarios through aerial evacuation of patients.⁵⁸ Ultimate Caduceus required USTRANSCOM to coordinate the aeromedical evacuation of patients, train Air Force aeromedical crews on the use of Civil Reserve Air Fleet (CRAF)⁵⁹ aircraft, and validate patient load configurations using CRAF aircraft.⁶⁰

National Guard Participation. The National Guard also plays a prominent role in NEP events. The National Guard Bureau (NGB) is a joint activity of the Department of Defense and one of its functions is to assist the Secretary of Defense in coordinating the use of National Guard personnel with USNORTHCOM and certain other entities.⁶¹ However, while NGB is a DOD entity, the National Guard itself is both a federal and a state organization.⁶² When the National Guard

⁵⁶ Fact Sheet, USNORTHCOM Portion of NLE 2-08, Mar. 7, 2008, provided to CRS by USNORTHCOM Public Affairs Office.

⁵⁷ Joint Task Force — Port Opening is a command and control expeditionary capability designed to rapidly establish an initial theater port of debarkation, aiding in deployment and distribution operations supporting military contingencies, humanitarian aid and disaster relief operations.

⁵⁸ U.S. Transportation Command Press Release, "Command Plays Major Role in National Exercise," April 30, 2008, on-line at [http://www.transcom.mil/pa/body.cfm?relnumber=080430-1].

⁵⁹ Under the CRAF, commercial air carriers voluntarily commit airliners to support DOD airlift requirements in emergencies when the need for airlift exceeds the capability of the military aircraft fleet. In exchange, commercial air carriers receive access to peacetime airlift business from DOD. For more information, see CRS Report RL33692, *Civil Reserve Air Fleet*, by William Knight and Christopher Bolkcom.

⁶⁰ Fact Sheet, Ultimate Caduceus, provided to CRS by USTRANSCOM Public Affairs Office.

⁶¹ Note that the relationship of the National Guard Bureau to the various state and territorial National Guard organizations is one of coordination, not of command.

⁶² The National Guard is usually both a state and a federal organization. The National Guard of the United States is made up of 54 separate National Guard organizations: one for each state, and one for Puerto Rico, Guam, the U.S. Virgin Islands, and the District of Columbia. While the District of Columbia National Guard is an exclusively federal organization and operates under federal control at all times, the other 53 National Guards operate as state or territorial organizations most of the time. In this capacity, each of these 53 organizations is identified by its state or territorial name (e.g. the California National Guard or the Puerto Rico National Guard), and is controlled by its respective governor.

participates in NEP events, it does so in its capacity as a state militia under the control of a governor. This is consistent with the manner in which the National Guard would most likely be utilized in responding to an actual domestic incident. Although National Guard personnel can be federalized to respond to certain domestic incidents, it normally remains in a state-controlled status during such events. State control has some key advantages. For example, National Guard personnel under state control are integrated into the command and control structure that directs state and local response efforts, and they may perform law enforcement duties as they are not affected by the Posse Comitatus Act. The National Guard of a state typically makes up a significant portion of a state's response force during a NEP event. During NLE 2-08, the Washington National Guard conducted civil support operations in their home state in response to a simulated terrorist attack, a tanker truck explosion, and the accidental release of a hazardous chemical. They remained under the control of their governor throughout the exercise.

Exercise Development and Implementation Guidance

Guidance related to civilian NEP and other exercises is based in part on FEMA's Homeland Security Exercise and Evaluation Program (HSEEP method).⁶⁴ Based on DOD exercise doctrine and modified for use in a civilian environment,⁶⁵ the HSEEP method provides a "a capabilities and performance-based exercise program that provides a standardized methodology and terminology for exercise design, development, conduct, evaluation, and improvement planning.⁶⁶ For federal departments and agencies, the NEP implementation plan identifies the HSEEP method as one of several "authorities and references,"and as "the doctrinal"

⁶³ The Posse Comitatus Act (18 U.S.C. 1385), along with other related laws and administrative provisions, prohibits the use of the military to execute civilian laws unless expressly authorized by the Constitution or an act of Congress. When acting in its capacity as the organized militia of a state, the National Guard is not part of the federal military and thus is not covered by the Posse Comitatus Act. As such, the National Guard can be used by state authorities to enforce the law. Only when it is called into federal service does the National Guard become subject to the act.

⁶⁴ "HSEEP" is used as an acronym in two contexts related to the NEP. In one instance, identified as the "HSEEP exercise program" in this report, it refers to the combined Post-Katrina Emergency Management Reform Act and HSPD-8 exercise programs as described in the NEP implementation plan, as discussed above. Another instance, discussed in this section, and identified in this report as the "HSEEP method," refers to FEMA's longstanding exercise design implementation and evaluation program. On its website, FEMA identifies the HSEEP method as "a capabilities and performance-based exercise program that provides a standardized methodology and terminology for exercise design, development, conduct, evaluation, and improvement planning" and "constitutes a national standard for all exercises," available at [https://hseep.dhs.gov/pages/1001_HSEEP7.aspx].

⁶⁵ OSD briefing July 23, 2008; and NGB briefing August 5, 2008.

⁶⁶ See the HSEEP method website at [https://hseep.dhs.gov/pages/1001_HSEEP7.aspx].

foundation for all tiers of NEP exercise activity." Guidance for implementing HSEEP has been disseminated widely to federal executive departments and agencies. Nevertheless, no explicit statutory or executive authority that compels federal agencies to use the HSEEP method was identified. If exercises conducted by state, territorial, local, or tribal government entities are paid for with funds obtained through the DHS Homeland Security Grant Program (HSGP), they "must be managed and executed in accordance with" the HSEEP method. DHS/FEMA staff assert that the HSEEP method is well accepted by federal executive departments and agencies, as well as state, territorial, local and tribal governments, and there is some evidence to support that assertion.

In practice, a common framework for exercise design, development, and conduct is arguably a necessary element, particularly for managing NEP-sanctioned interagency exercises to test national level response strategies and leadership of executive branch departments and agencies. Without such a framework, it is unclear how the NEP CAP could function as a means to identify and track interagency issues identified through the NEP. At the same time, the NEP implementation plan does not clearly distinguish how the HSEEP method might be used to address differences between strategic, government-wide, or interagency issues, and operational or tactical issues that may be of concern only to one department or agency. Where the former might be addressed through the NEP CAP interagency process, the latter may be subject to extant exercise methods and processes that are internal to the relevant agency. This potential concern is most prominent regarding Tier 3 and 4 intra-agency exercises, since the NEP does not explicitly prohibit the use of internal exercise methodology or doctrine at those exercise levels. Interagency and internal, agency-specific issues could also arise in the context of Tier 1 and 2 exercises.

⁶⁷ NEP implementation plan, pp. 2, 4.

⁶⁸ See DHS, *Fiscal Year 2008 Homeland Security Grant Program Guidance and Application Kit*, Feb. 2008, available at [http://www.fema.gov/pdf/government/grant/hsgp/fy08_hsgp_guide.pdf].

⁶⁹ In discussions with CRS, Kelly Jo Craigmiles, Exercise Training Officer, Oregon Emergency Management, August 14, 2008 (hereafter Oregon OEM); Carmen Merlo, Director, Portland, Oregon Office of Emergency Management, August 18, 2008 (hereafter, Portland OEM); and Department of Justice, Bureau of Alcohol Tobacco, Firearms and Explosives (ATF) staff, August 15, 2008 (hereafter ATF briefing) all indicated that their agencies used the HSEEP method.

The NEP implementation plan applies the HSEEP method's framework of seven exercise types. Tour of the seven types, which include, seminars, workshops, tabletop exercises (TTX), and games, are discussion-based exercises. Discussion-based exercises typically focus on strategic, policy-oriented issues, or are used to highlight existing plans, policies, and procedures. Operations-based exercises, which include drills, functional exercises (FE), and full-scale exercises (FSE), are used to validate the plans, policies, agreements and procedures developed in discussion-based exercises. Operations-based exercises are characterized by actual reaction to simulated intelligence; response to emergency

⁷⁰ NEP implementation plan, pp. 14-15.

⁷¹ The HSEEP method guidance describes a seminar-based exercise as "an informal discussion, designed to orient participants to new or updated plans, policies, or procedures." See DHS, "Homeland Security Exercise and Evaluation Program: Terminology, Methodology, and compliance Guidelines," available at [https://hseep.dhs.gov/support/HSEEP_101.pdf]. Also see, generally, Environmental Protection Agency (EPA), "Exercises," available at [http://www.epa.gov/radiation/rert/exercises.html].

⁷² A workshop is similar to a seminar, "but is employed to build specific products, such as a draft plan or policy." Ibid.

⁷³ A TTX "involves key personnel discussing simulated scenarios in an informal setting." Ibid. TTX participants may test an emergency response plan and its standard operating procedures by informally discussing, or "walking through," a hypothetical emergency. A TTX may also be used as a followup to an exercise. Following the Oct. 2007 TOPOFF 4 full scale exercise (FSE), a two-day TTX was held. The exercise brought "together leaders from government, private sector, and nongovernmental organizations (NGOs) to discuss key technical, operational, and policy challenges surrounding recovery from the detonation" of radiological dispersion device (RDD), and long-term recovery issues from 50 days after a detonation. See Interagency Coordinating Council on Emergency Preparedness and Individuals with Disabilities, "DHS Participation in TOPOFF 4 Continues," Nov. 2007, available at [http://www.disabilitypreparedness.gov/bulletins/nov_07.htm].

⁷⁴ Games are simulations "of operations that often involves two or more teams, using rules, data, and procedure designed to depict an actual or assumed real-life situation." Ibid.

⁷⁵ The HSEEP method guidance describes a drill as "a coordinated, supervised activity usually employed to test a single, specific operation or function within a single entity...." Ibid. This could include emergency medical services conducting a field decontamination.

⁷⁶ Functional exercises, examine "the coordination, command, and control between various multi-agency coordination centers," including emergency operation centers (EOC), joint field offices (JFO), and similar facilities. An FE does not involve the deployment of resources to the field to respond to a simulated incident in real time. Ibid. An FE may also be referred to as a "command post exercise"(CPX). A DHS press release described the TOPOFF 4 CPX, for example, as "real-time, functional assessments of communications, planning, and decision-making capabilities in a time of crisis" in which "limited numbers of emergency response personnel were deployed into the field." Department of Homeland Security, "U.S. Department of Homeland Security Announces Completion of TOPOFF 4 Command Post Exercise to Address Counterterrorism Preparedness and Response Capabilities," press release, June 22. 2006, available at [http://www.dhs.gov/xnews/releases/press_release_0932.shtm].

⁷⁷ A full-scale exercise is a multi-agency, multi-jurisdictional, multi-discipline exercise involving functional field response.

conditions; mobilization of apparatus, resources and/or networks; and commitment of personnel, usually over an extend period of time.

Structurally, the HSEEP method is divided into five volumes. Volume I, *HSEEP Overview and Exercise Program Management*, 78 provides guidance for building and maintaining an effective exercise program, and summarizes the planning and evaluation process. Subsequent volumes describe those processes in detail. Volume II, *Exercise Planning and Conduct*, 79 provides an outline for a standardized exercise foundation, 80 and design, development, and conduct processes adaptable to any type of exercise, and is discussed below. Volume III, *Exercise Evaluation and Improvement Planning*, 81 offers a method for evaluating and documenting exercises and implementing an improvement plan, and is also discussed below. Volume IV, *Sample Exercise Documents and Formats*, 82 provides sample exercise materials. Volume I serves as an introduction to the HSEEP method; Volume IV exists as a document database to authorized users. Consequently, Volumes II and II, which provide exercise planning and conduct, and exercise evaluation and improvement planning, respectively, are discussed below.

Exercise Planning: The HSEEP Method, Volume II. Volume II of the HSEEP method, *Exercise Planning and Conduct*, ⁸³ assists users in constructing an exercise program through a planning process that DHS argues is adaptable to any type of exercise scenario. Volume II provides a discussion of the various components of designing and developing an exercise program. Broadly, the exercise design process provided may be summarized as

- identifying the organization's capabilities, tasks, and objectives;
- designing the scenario;
- developing exercise support documents (guides, handbooks and situation manuals);
- coordinating logistics;
- planning how the exercise will be conducted; and
- selecting an evaluation and improvement methodology.

The HSEEP method guidance recommends that an exercise planning team, the principal venue for exercise command and control, should be convened. The team should be of manageable size, but representative of the full range of organizations

⁷⁸ Available at [https://hseep.dhs.gov/support/VolumeI.pdf].

⁷⁹ Available at [https://hseep.dhs.gov/support/VolumeII.pdf].

⁸⁰ The HSEEP method identifies an "exercise foundation," as the necessary precondition for the exercise program. It consists of a base of support where all participants agree to the importance of the exercise and understand the link between the purpose and objectives of the exercise program and the strategic goals of the organization.

⁸¹ Available at [https://hseep.dhs.gov/support/VolumeIII.pdf].

⁸² Available at [https://hseep.dhs.gov/hseep_vols/HSEEP_Vol4/IVIntro.pdf].

⁸³ The HSEEP method Volume II, *Exercise Planning and Conduct*, available at [https://hseep.dhs.gov/support/VolumeII.pdf]. Unless noted otherwise, all material in this section is drawn from the HSEEP method Volume II.

and stakeholders participating in the exercise. The guidance suggests that this may be accomplished by dividing the exercise planning team into five sections. These sections include

- a command section that oversees exercise planning and activities;
- an operation section that provides for technical and functional expertise;
- a planning section that develops exercise documentation, including policies, procedures, and evaluations;
- a logistic section that provides material, supplies, services, and facilities; and
- an administration and finance section that oversees the budget of the exercise.

Exercise Evaluation: The HSEEP Method, Volume III. Volume III of the HSEEP method, *Exercise Evaluation and Improvement Planning*, ⁸⁴ applies "capabilities-based planning" for developing emergency preparedness and response capabilities suitable for responding to a wide range of threats and hazards. The HSEEP method uses a target capabilities list (TCL) from the National Preparedness Guidelines developed by DHS⁸⁵ to conduct initial exercise evaluation and analysis. The TCL includes 37 identified capabilities distributed among capabilities common to all response, and four specialized mission capabilities, including prevent, protect, respond, and recover. ⁸⁶ Exercise capabilities are subjected to three levels of analysis:

⁸⁴ The HSEEP method Volume III, *Exercise Evaluation and Improvement Planning*, available at [https://hseep.dhs.gov/support/VolumeIII.pdf]. Unless noted otherwise, all material in this section is drawn from the HSEEP method Volume III.

⁸⁵ The TCL is available in U.S. Department of Homeland Security, *Target Capabilities List: A Companion to the National Preparedness Guidelines*, Sept, 2007, available through the Lessons Learned Information System (LLIS) to authorized users, at [https://www.llis.dhs.gov/docdetails/details.do?contentID=26724]. The NPG is available at [http://www.dhs.gov/xlibrary/assets/National_Preparedness_Guidelines.pdf].

⁸⁶ In the TCL, common capabilities include planning; communications; community preparedness and participation; risk management; and intelligence and information sharing and dissemination. Prevent mission capabilities include information gathering and recognition of indicators and warning; intelligence analysis and production; counter-terror investigation and law enforcement; and chemical, biological, radiological, nuclear explosives (CBRNE) detection. **Protect mission capabilities** include critical infrastructure protection; food and agriculture safety and defense; epidemiological surveillance and investigation; and laboratory testing. Respond mission capabilities include on-site incident management; emergency operations center (EOC) management; critical resource logistics and distribution; volunteer management and donations; responder safety and health; emergency public safety and security; animal disease emergency support; environmental health; explosive device response operations; fire incident response support; WMD and hazardous materials; response and decontamination; citizen evacuation and shelter-in-place; isolation and quarantine; search and rescue (land-based); emergency public information and warning; emergency triage and pre-hospital treatment; medical surge; medical supplies management and distribution; mass prophylaxis; mass care (sheltering, feeding and related services); and fatality management. **Recover mission capabilities** include structural damage (continued...)

task-level analysis, activity-level analysis, and capability-level analysis. Other components of exercise evaluation include the following:

Exercise Evaluation Guides (EEG). EEGS assist exercise evaluators by providing them with a consistent set of standards and guidelines for data collection, observation, analysis, and report writing. Information obtained through the EEG is used to record the degree to which a prescribed task or performance measure was accomplished during the exercise.

Debriefing. Immediately after an operations-based exercise, evaluators debrief exercise players and controllers.⁸⁷ This facilitated discussion, known colloquially as a "hot wash," allows players to engage in a self-assessment of their exercise play and provide a general assessment of how the organization performed in the exercise.

Data analysis. Following the debriefing, evaluators review the notes of the discussion and begin to develop preliminary analyses of the exercise, including the development of a chronological narrative of each capability and associated activities. From the notes, evaluators develop a draft after action report (AAR) that highlights strengths and areas for improvement and identify discussion points relevant to an organization's ability to carry out the activities and demonstrate the capabilities being exercised.

AAR/Improvement Plan (IP). An AAR articulates the observations of an exercise and makes recommendations for post-exercise improvements. An IP identifies specific corrective actions, ⁸⁸ assigns these actions to responsible parties, and establishes target dates for action completion. The AAR and the IP are distributed jointly as a single document.

After Action Conference. Members of the evaluation team, and other members of the exercise planning team conduct an After Action Conference to present, discuss, and refine the draft AAR. The conference serves as an opportunity for entities that participated in the exercise to provide feedback and make necessary changes to the AAR. Any corrective actions are assigned to a responsible person or agency.

^{86 (...}continued)

assessment; restoration of lifelines; and economic and community recovery. See DHS, *Target Capabilities List*, p. vii, at [https://www.llis.dhs.gov/docdetails/details.do?contentID=26724].

⁸⁷ Larger exercises involving multiple agencies may feature a series of hot washes in which smaller organizations, or smaller units of larger organizations, provide initial observations and assessments of their exercise participation. The findings from these debriefings may be forwarded to exercise commanders for incorporation into an exercise-wide AAR, and may be retained by an agency for development of internal AARs, or as guidance in internal improvement programs.

⁸⁸ An improvement plan may also be identified by some agencies as a corrective action program.

Finalization of the AAR/IP. Following the After Action Conference, the exercise planning and evaluation teams finalize the AAR/IP. This involves incorporating the corrections, clarifications, and other feedback provided by participants at the After Action Conference

Track implementation. The HSEEP method guidance suggests that the implementation of corrective actions identified in the final AAR/IP should be assigned to exercise and emergency response personnel who participated in an exercise.

DOD Exercise Evaluation

Exercise evaluations conducted by Department of Defense organizations will typically be conducted in accordance with individual service or joint doctrine, depending on whether the organization or activities being evaluated are service-specific or multi-service. The HSEEP method is only used to evaluate interagency activities. To illustrate this, the process used by USNORTHCOM to collect, evaluate, and forward data to other agencies and the Joint Staff is outlined below. The final paragraph addresses the unique situation of the National Guard.

One of the primary DOD organizations to participate in NLEs at the operational level is USNORTHCOM. USNORTHCOM follows a structured process to evaluate the command's performance after both exercises and operations. During exercises, observations and findings are collected by dedicated observers and from submissions provided voluntarily by other exercise participants. The dedicated observers are subject matter experts in the areas they are assigned to watch. Their task is to both look for general "lessons" and to assess mission performance in order to help commanders evaluate the quality of training received during an exercise. Observers also validate the effectiveness of specific corrective actions implemented since the last exercise or operational event. Exercise participants have access to a web-based lessons-learned application that allows review of past lessons and entry of new observations. USNORTHCOM holds "hot wash" meetings after major events to discuss and consolidate lessons learned. For exercises, these are held after completion of an exercise at a variety of levels before the commander and his or her staff conduct a formal after action review. A "quick look" report is compiled within 30 days of exercise completion to describe the exercise and initial internal results. A more comprehensive report, which includes observations and reports from participating organizations, is compiled within 90 days of exercise completion. Requests for corrective actions are coordinated through USNORTHCOM headquarters where they are entered into a lessons-learned database, assigned an Office of Primary Responsibility to implement necessary corrective action, and tracked until all required corrective actions are completed. For findings that require involvement of organizations outside USNORTHCOM, the headquarters will draft and send a message to the involved agency requesting the action needed.⁸⁹

⁸⁹ Much of the information in this section was provided by USNORTHCOM Legislative Affairs by e-mail to CRS on May 16, 2008.

This information is also typically submitted to the Joint Lessons Learned (JLLIS) Program Manager at the Joint Staff (J7) as well. DOD uses the JLLIS to collect inputs from all of the Combatant Commands, as well as from the various defense agencies, OSD and the Joint Staff. These inputs form the basis for developing interagency lessons learned and requests for corrective action. Interagency issues of a critical nature or which involve national policy or legislative change are entered by J7 into the NEP CAP database and tracked accordingly. The use of NEP CAP by DOD is still a relatively new process; the expectation is that it will be utilized with greater frequency as the NEP matures.⁹⁰

National Guard Exercise Evaluation. As noted previously, the National Guard also plays a significant role in NLE events, but they typically participate in their capacity as a state militia rather than as a federal reserve force. As such, they operate under the control of their state governor rather than the Department of Defense. This unique status introduces some ambiguity into methods by which National Guard forces are evaluated during an NLE. Although they would normally perform their assigned tasks in accordance with the Army or Air Force doctrine, ⁹¹ or joint doctrine if applicable, there are certain tasks that would likely be governed or influenced by state guidance (for example, conducting law enforcement or search and rescue activities). Moreover, it is unclear whether participating National Guard units would be evaluated by state and local officials using the HSEEP method, by military observers using service or joint doctrine, or both. The extent to which interagency issues identified by these evaluations are entered into the NEP CAP database is also unclear.

Discussion and Analysis

Official and scholarly post-exercise reviews suggest that some benefits result from running preparedness exercises. It has been argued that the TOPOFF series has improved preparedness, particularly at the state and community levels. Participants in TOPOFF 4 in the Oregon venue indicate that the exercise experience was particularly helpful when the state responded to a flooding incident a few weeks after the FSE. The exercise offered emergency managers and responders an opportunity to meet and interact, which facilitated, and in some cases expedited, incident response. Other observers note that participation in TOPOFF 4 highlighted the

⁹⁰ Much of the information in this section was provided by OSD Legislative Affairs by e-mail to CRS on September 30, 2008.

⁹¹ In the case of the Army National Guard and the Air National Guard, respectively.

⁹² For example, challenges associated with the dissemination of vaccines have been identified and subsequently revamped following bio-terrorism exercises. See Aaron Katz, Andrea B. Saiti, and Kelly L. McKenzie, "Preparing for the Unknown, Responding to the Known: Communities and Public Health Preparedness," *Health Affairs*, vol. 25, no. 4 (July/August, 2006), pp. 947-948.

⁹³ Oregon OEM, August 14, 2008.

importance of emergency management to local officials.⁹⁴ Two potential concerns arise however, including 1) whether or how state and local preparedness grows in localities that do not participate in TOPOFFs or future NLEs; and 2) how experiences and knowledge gained from exercises lead to revision of the emergency plans of participating jurisdictions.

Exercises strengthen core functions that contribute to the success of various preparedness programs. For example, the nation's medical and public health system's ability to respond to a bioweapons attack has been comprehensively tested through the TOPOFF series, and, according to some observers, has provided several lessons as to how it might respond to future epidemics. Further, collaborative relationships which had not existed previously between different levels of government and disparate agencies have developed during TOPOFF exercises. For example, activities focused on bioterrorism have brought public health officials together with emergency management, fire and police departments, and medical care providers in active working relationships.

Exercise observers, planners and participants generally agree that exercise experiences contribute to overall preparedness. Nevertheless, the evolution and maturation of emergency preparedness doctrine as expressed in NRF, NIMS, NPG, and the HSEEP method, and the emergence of NEP, may raise a number of questions and issues that Congress might consider. These arise in three broad, interrelated topical areas: National preparedness policy, exercise findings, and exercise operations. National preparedness policy topics include the following:

- authorities under which NEP is created and managed;
- state, territorial, local, tribal and private sector participation in the NEP;
- evaluating NEP progress;
- the status of the National Exercise Center;
- communicating preparedness policy; and
- congressional issues.

Exercise findings issues are not directly related to the NEP, but address matters that have been identified through exercises, and which may inform considerations of an array of policy areas related to preparedness. Exercise findings topics include the following:

- surge capacity; and
- interstate movement of commercial emergency response vehicles.

Exercise operations topics incorporate a number of matters related to the planning and conduct of exercises, including

⁹⁴ Portland OEM, August 18, 2008.

⁹⁵ Katz, Saiti, and McKenzie, "Preparing for the Unknown," p. 950.

⁹⁶ Thomas V. Inglesby, "Observations from the Top Off Exercise," *Public Health Reports*, vol. 116, supplement 2 (2001) p. 64.

- realism in exercise scenarios and exercise play;
- the scale and scope of exercises;
- exercise evaluation concerns; and
- the status of existing exercise programs as NEP evolves.

National Preparedness Policy

Implementing Preparedness Exercise Programs: Which Authority?

The extent to which HSC, DHS, or FEMA exercise leadership on a national exercise program incorporating federal, state, territorial, local, and tribal levels of governments, as well as private sector actors, is unclear. Among other concerns, the extent to which DHS has implemented the direction set out by Congress in the Post-Katrina Emergency Management Reform Act, as well as whether the NEP advances the state of preparedness of the government to respond effectively to emergency management incidents, is at issue.

One challenge is the apparent conflation of authorities requiring preparedness exercises. The NEP implementation plan attempts to integrate the mandates of two authorities — one, a statute (the Post-Katrina Emergency Management Reform Act), the other a presidential directive (HSPD 8) — while asserting that the "NEP shall serve as the principal mechanism for (1) examining the preparedness of the USG and its officers and other officials and (2) adopting policy changes that might improve such preparation."97 This statement implies the assertion of a third, executive-based authority, either the NEP charter, or the NEP implementation plan itself. Broadly, the focus of the NEP implementation plan could bring into question the extent to which the Bush Administration is implementing exercise-relevant portions of the Post-Katrina Emergency Management Reform Act and HSPD 8. The extent to which the NEP will become a "single comprehensive exercise program," may also be questioned, since the NEP implementation plan states that the NEP is directed at principals of federal agencies, and other, unspecified key officials to link "appropriate National and regional ... exercises," but does not explicitly incorporate state, territorial, local, or tribal government participation. Finally, the assertion that the NEP is the principal mechanism to adopt policy changes raises questions about the role of Congress in the evaluation and development of emergency preparedness exercise policy.

Further complicating understanding of the NEP is the Administration-mandated integration of the HSPD 8-based exercise program, and provisions of the Post-Katrina Emergency Management Reform Act, or some unspecified combination of both, as "one key pillar of the overarching [NEP] framework" called "HSEEP." Provisions of paragraph 18 of HSPD 8 and section 648 of the Post-Katrina Emergency Management Reform Act are similar, but some of the exercise parameters mentioned in the statute do not appear to be incorporated into the NEP implementation plan. For example, the Post-Katrina Emergency Management Reform Act provisions requiring that exercises be designed to stress the National preparedness system do not appear to receive consideration in the NEP

⁹⁷ NEP implementation plan, p.1.

⁹⁸ Ibid., p. 3.

implementation plan. The implementation plan does mention a need to address the unique requirements of populations with special needs, 99 but does not define those populations, or what measures might be necessary to exercise to ensure that they are adequately served. Similarly, and discussed in greater detail below, the Administration does not appear to be implementing exercises with limited notice to participants, as required by the Post-Katrina Emergency Management Reform Act.

Implementing Preparedness Exercise Programs: Which Officials?

The NEP implementation plan explicitly acknowledges the authority of section 648 of the Post-Katrina Emergency Management Reform Act, and identifies the Secretary of DHS as the official responsible for NEP exercise management. The conflated implementation of the Post-Katrina Emergency Management Reform Act, and HSPD-8 in the HSEEP exercise program, coupled with the apparent incorporation of that program in a manner subordinate to the NEP, raises questions regarding the FEMA Administrator's ability to carry out statutory authority assigned to him by Congress to carry out a National exercise plan. 100 For example, how does the implementation of HSPD-8 and the NEP implementation plan affect the FEMA Administrator's responsibilities to carry out a National exercise program, as directed in the Post-Katrina Emergency Management Reform Act? To what extent are HSC, NSC, or other DHS entities involved in NEP, HSEEP exercise program, or Post-Katrina Emergency Management Reform Act planning and implementation? If disputes arise among agencies, what decision making authority might the FEMA Administrator exercise pursuant to his Post-Katrina Emergency Management Reform Act authority? How might the Secretary of DHS balance authorities and mandates conferred by the President with the statutory obligations assigned to the Administrator?

Issues related to the role of the FEMA Administrator in the NEP may also mirror more general concerns about the role of FEMA in DHS, or raise questions of which government official is ultimately responsible for emergency preparedness. Relatedly, managing NEP implementation through an interagency process led by a cabinet-level entity or one of its subordinate components may also raise questions. If the consensus on which much of the NEP decision making relies is not achieved, what capacity does any official in DHS have to lead or compel the heads of other federal executive agencies to comply with NEP-related directives? How might leaders of executive agencies with exercise responsibility under their own authority participate in NEP processes?

State, Territorial, Local, and Tribal Participation in the NEP. Some observers assert that emergency preparedness response and recovery are basic tasks of government at all levels of government, and that the very nature of a federalized system of government itself poses significant challenges to developing and exercising

⁹⁹ The Post-Katrina Emergency Management Reform Act, P.L. 109-295, sec. 648(b)(2)(v), 120 Stat. 1428 mandates that the exercises be designed to address the unique requirements of populations with special needs. Beyond using the EEG to identify at risk populations, it is unclear what is being done to address special needs populations.

¹⁰⁰ The Post-Katrina Emergency Management Reform Act, P.L. 109-295, sec. 648.

homeland preparedness plans.¹⁰¹ The NEP implementation plan is binding on the federal executive branch but does not mandate exercise participation by sub-national units of government. While the focus of NLEs is chiefly on federal strategies and senior leader participation, future NEP Tier 1 and 2 exercises might require the participation of state, territorial, and local governments. Moreover, the Post-Katrina Emergency Management Reform Act requires national exercises to "test and evaluate the readiness of Federal, State, local, and tribal governments to respond and recover in a coordinated and unified manner to catastrophic incidents."¹⁰² Despite this, the NEP implementation plan is unclear how state, territorial, local, and tribal governments might be integrated into NLEs, or other exercise components.

TOPOFF exercises were carried out in states that volunteered to participate, ¹⁰³ and which were selected by DHS. If practices used in the TOPOFF series continue under the NEP, participation by states and municipal or tribal governments will likely represent a significant commitment of their time and resources. Under funding mechanisms used in previous TOPOFF exercises, DHS provided some direct funding for state and municipal participation. Participants in TOPOFF 4, however, were required to apply funds received through the Homeland Security Grant Program (HSGP) and Urban Area Security Initiative (UASI)¹⁰⁴ (which in some cases were intended by recipients for other purposes), ¹⁰⁵ or to fund their participation with their own resources. In the Oregon venue of TOPOFF 4, the City of Portland worked on the exercise for two years prior to the FSE, and spent more than \$10 million. Of that total, UASI grants covered between \$6 million and \$8 million, leaving the city to pay more than \$2.5 million. 106 It might be the case that some non federal participants could choose not to participate in future NLEs if that participation would supplant their ongoing emergency preparedness program, or if they lacked the resources to fund their participation. A potential consequence could be that state, territorial, local or tribal jurisdictions with the means to participate could develop more robust, effective preparedness programs, while non participants could be less prepared to respond to incidents in their areas of responsibility.

State and local participants in TOPOFF 4 also indicated concern about the clarity of expectations and the extent of mutual agreement regarding those

¹⁰¹ See Christine E. Wormuth and Anne Witkowsky, *Managing the Next Domestic Catastrophe*, pp. vi, 5-9.

¹⁰² Ibid., p. 3.

¹⁰³ Portland OEM, August 18, 2008; and Oregon OEM August 16, 2008.

¹⁰⁴ 6 U.S.C. 321(a) allows DHS grants made to states or local or tribal governments HSGP or UASI to conduct exercises of mass evacuation plans in the event of a natural disaster, act of terrorism, or other man-made disaster. 6 U.S.C. 609(a)(2) allows DHS grants made to states or local or tribal governments HSGP or UASI to be used to design, conduct, and evaluate training and exercises, including national exercises. See CRS Report RL32348, Selected Federal Homeland Security Assistance Programs: A Summary, by Shawn Reese.

¹⁰⁵ At the time of the TOPOFF 4 planning and FSE phases, UASI and HSGP grant recipients were required to apply grant resources to counter terrorism preparedness activities. Since TOPOFF 4, funding options have broadened to incorporate an all-hazards orientation.

¹⁰⁶ Portland OEM, August 18, 2008.

expectations among local, state, national exercise planners and participants. Some local participants noted that opportunities to collaborate with DHS during the exercise design and development process were limited, with one observer describing their office's interactions as "more of a directive process," with DHS providing the direction.¹⁰⁷ This may be of concern, since another participant noted that during exercise play in the Oregon venue, federal participation, other than radiological monitoring, was not required for the state to respond to the exercise scenario. 108 State and local participants in the Oregon venue also raised concerns that the memoranda of understanding (MOU) governing expectations and responsibilities of the participants and DHS were not finalized until the day FSE exercise play began, and near the end of the period covered by the MOU.¹⁰⁹ This may raise questions regarding the utility of the exercise for some federal participants (See Exercise Scale, below), as well as the extent to which DHS engages the input of state, territorial, local and tribal entities regarding exercise planning that affect their jurisdictions. On the other hand, the explicit focus on federal departments and agencies presented in the NEP implementation plan¹¹⁰ may better communicate the intent of NLE activities in a manner in which the TOPOFF series did not.

A related area of concern regarding intergovernmental interactions is that preparedness doctrine requires that in an actual incident, municipalities respond first. Responders and organizations on scene may request state or territorial support and assistance, and states and territories may in turn request federal support. It is questionable how those assumptions could be incorporated into preparedness planning if exercises are planned in a manner that imposes a federal presence into what are arguably exclusive local responder responsibilities.

Private Sector Participation. One TOPOFF 4 private sector participant noted that the need to exercise response plans are not exclusive to the public sector because "an emergency or disaster will affect us all." Key resources and critical infrastructures are in private hands. Small firms account for 85% of all U.S. businesses, yet some critics claim that small businesses were left out of TOPOFF exercises. These critics point out that manufacturing and distribution firms also need to test their preparedness plans to make sure they are congruent with National preparedness levels. Private sector participants in the TOPOFF 4 Oregon venue

¹⁰⁷ Ibid.

¹⁰⁸ Oregon OEM August 16, 2008.

¹⁰⁹ Ibid., and Portland OEM, August 18, 2008.

¹¹⁰ NEP implementation plan, pp. 2-3.

¹¹¹ CRS discussion with Doug McGillivray, TOPOFF 4 lead, Private Sector Working Group, Portland, Oregon area, August 29, 2008 (hereafter McGillivray, Private Sector Working Group), Portland OEM, August 18, 2008; and Oregon OEM August 16, 2008.

¹¹² "DRI Calls for Small Firm Participation in Next TOPOFF Preparedness Drill" Emergency Preparedness News, April 19, 2005.

have suggested that during the planning phases, communications between privatesector and government participants were sometimes challenging, or nonexistent.¹¹³

On the other hand it is arguable that TOPOFF 4 and future NLEs are chiefly designed to exercise national strategic issues to test emergency response capacities through national planning scenarios. Moreover, during the TOPOFF 4 FSE in the Oregon venue, approximately 40 private sector entities participated, and private sector observers were placed in state and county emergency operations centers (EOC) to observe and relay exercise information to a DHS-funded private sector EOC for transmission to interest private sector entities. At the same time, it has been asserted that public sector exercise authorities were unaware, and did not seek to learn during exercise play, of private sector capacities to provide technical and logistical support in the exercise, and presumptively, in response to an incident. Further, during the after action phase of TOPOFF 4, it has been asserted that private sector concerns were "ignored or dismissed" by federal exercise officials. ¹¹⁴ In its quick look AAR, DHS identifies effectively integrating the private sector into some aspects of the exercise response as an area for improvement, noting that "[t]here are many federal, state, and local agencies with similar and overlapping responsibilities for private sector coordination that appear to complicate private sector participation in response and recovery activities." The report also said that "the private sector was prepared to be engaged and coordination improved later in the exercise."¹¹⁵

Private sector participation in exercises may also occur at the national level. AT&T, a communications holding company, through its representatives in the National Coordinating Center for Telecommunications (NCC), "were engaged throughout the planning phase and had significant input for the cyber/communications components of the [TOPOFF 4] exercise through DHS and its exercise contractors." The company also deployed various response teams to exercise venues. The firm notes that it did raise concerns related to TOPOFF 4, and that while responses received through NCC "are a work-in-progress that do not

¹¹³ Kristen Hartwigsen, Senior Business Continuity Analyst, Nike, Inc., presentation at the 2008 DOD Defense Continuity and Crisis Management Conference, May 14, 2008, and in discussion with CRS, August 14, 2008. Ms. Hartwigsen is also the founding director of the Oregon Regional Emergency Network, and is a member of the Oregon State DHS Public Private Subcommittee.

¹¹⁴ McGillivray, Private Sector Working Group, August 29, 2008.

¹¹⁵ Department of Homeland Security *Top Officials 4 (TOPOFF 4) Full-scale Exercise (FSE), After Action Quick Look Report,* November 19, 2007, p. 8, available at [http://www.fema.gov/pdf/media/2008/t4_after%20action_report.pdf].

¹¹⁶ According to its website [http://www.ncs.gov/ncc/],the NCC is component of the National Communications System (NCS) which resides in DHS National Protection and Programs. NCC is a joint government and industry structure and emergency response capability that coordinates "the initiation, restoration, and reconstitution of United states government national security and emergency telecommunications services."

produce immediate results..., [p]artnering with government is a process, not a project, which relies on relationships and mutual understanding."¹¹⁷

Congress might inquire as to the extent to which private sector entities and nongovernmental organizations (NGO) are involved in exercises carried out under the NEP as well as the manner in which that participation affects preparedness capacities.

Evaluating NEP Progress. The NEP implementation plan notes that FY2007 and FY2008 "have and shall be devoted to attaining full operational capability to support the NEP Concept of Operations," and that various process milestones were to be achieved before September 30, 2008. Process milestones include the first implementation of the full NEP annual exercise programming process, which began in Aug. 2007; DHS developed templates and guidance on NEP products for consideration prior to June 30, 2007; and the first NEP Strategic Exercise Guidance, that was to be issued in September 2008. Additionally, the NEP implementation plan states that "all NEP support capabilities ... shall be fully implemented no later than September 30, 2008, in time to support the first full NEP strategic exercise cycle." Did NEP reach those milestones? How were the milestones developed?

National Exercise Simulation Center. Following Hurricane Katrina, the Bush Administration recommended that DHS "develop and fund a National Exercise Simulation Center [(NESC)] similar to" the DOD JWFC to "act as a tool to simulate the Federal role in emergency response and be capable of working with State and local exercises." The Post-Katrina Emergency Management Reform Act requires the President to "establish a national exercise simulation center that uses a combination of live, virtual, and constructive simulations to prepare elected officials, emergency managers, emergency response providers, and emergency support providers at all levels of government ... to exercise decision making in a simulated environment." While not directly related to the NEP, the statutory mission of the NESC appears to position it as a significant resource to support NEP goals. No request for funding from DHS/FEMA, nor authorization or appropriation by Congress for NESC for FY2008 and FY2009 was identified. In its FY2009 appropriation, DHS/FEMA received approximately \$429 million for training, technical assistance, exercises, and evaluations. Of that total, it appears that approximately \$70 million is available after other programs and initiatives have been

¹¹⁷ Email communication with Harry Underhill, Director, Critical Infrastructure Protection, AT&T, August 19, 2008, hereafter, Underhill, AT&T email.

¹¹⁸ See NEP implementation plan, p. 21.

¹¹⁹ President George W. Bush, *The Federal Response to Hurricane Katrina: Lessons Learned* (Washington: White House, 2006), p. 119, available at [http://www.whitehouse.gov/reports/katrina-lessons-learned.pdf].

¹²⁰ Post-Katrina Emergency Management Reform Act, P.L. 109-295, sec. 664, 120 Stat. 1433, 6 U.S.C. 764.

funded.¹²¹ Through authorization, appropriations and other oversight processes, Congress could inquire as to the status of the center, including whether it has been established, or the extent of its development.

Communicating Preparedness Policy. In the past decade, national preparedness policy has been expressed in a number of congressional and executive branch policy statements and guidance documents. Among those documents are the Homeland Security Act of 2002, 122 Post-Katrina Emergency Management Reform Act, National Strategy for Homeland Security, 123 HSPD-5 on the management of domestic incidents, ¹²⁴ HSPD-8, NPS, NRF, NPG, NIMS, the HSEEP method, and NEP. Some documents are not readily available to officials and other interested parties, raising questions of how effective they may be as a means of communicating policy intentions. Some may conflict with others as the Post-Katrina Emergency Management Reform Act and HSPD-8 appear to do. Others have not been updated to reflect the introduction and integration of newer programs and policies, or refer to documents or programs that have been superceded. For example, the HSEEP method materials refer to the National Response Plan and the National Preparedness Goal, which have been superceded by the NRF and NPG, respectively. On the HSEEP method website, FEMA indicates that the "HSEEP [method] is compliant with, and complements, several historical and current Federal directives and initiatives" but does not include the Post-Katrina Emergency Management Reform Act. 125 The profusion of policy statements and guidance could lead to a lack of clarity of what various preparedness initiatives are intended to accomplish, and which documents communicate current requirements for response entities. Regarding exercises, it could be argued that the lack of a clearly stated preparedness policy is constrained by the lack of an explicit statement of how national preparedness priorities drive exercise programs.

Congressional Interest. The development of a national emergency preparedness exercise program through a federal executive interagency process would appear to present Congress with a number of legislative and oversight options. Government operations in the executive branch are generally overseen by the House Committee on Oversight and Government Reform (OGR), and the Senate Committee on Homeland Security and Governmental Affairs (HSGAC). OGR has jurisdiction over government management measures, including the "management of government

¹²¹ See CRS Report RS22805, FY2009 Appropriations for State and Local Homeland Security, by Shawn Reese.

¹²² P.L. 107-296, Homeland Security Act of 2002, 116 Stat. 2135, 6 U.S.C. 101.

¹²³ Executive Office of the President, Office of Homeland Security, *National Strategy for Homeland Security*, August, 2002, available at [http://www.whitehouse.gov/homeland/book/nat_strat_hls.pdf].

Homeland Security Presidential Directive/HSPD-5, "Management of Domestic Incidents," available at [http://www.whitehouse.gov/news/releases/2003/02/20030228-9.html].

¹²⁵ See FEMA, HSEEP method website, "About HSEEP," at [https://hseep.dhs.gov/pages/1001_About.aspx].

operations and activities,"¹²⁶ which would appear to give it a role in emergency preparedness and exercise oversight across the executive branch. The House Committee on Homeland Security has both oversight and legislative responsibility regarding the Department of Homeland Security, including "domestic preparedness for and collective response to terrorism," as well as "broad oversight authority over government-wide homeland security matters."¹²⁷ In the Senate, the Committee on Homeland Security and Governmental Affairs has jurisdiction over matters relating to the Department of Homeland Security, with certain limitations,¹²⁸ as well as "organization and reorganization of the executive branch of the government."¹²⁹ This would appear to give both panels some government-wide role in overseeing the guidance and implementation of homeland security preparedness and exercises. At the same time, it is arguable that other congressional committees could have authority to oversee the preparedness and exercise activities of executive branch entities under their jurisdiction.¹³⁰

Exercise Findings Issues

Surge Capacity. A recurring deficiency revealed through TOPOFFs is inadequate surge capacity. Many hospitals, police and fire departments cannot meet the level of demand a disaster or large-scale emergency places on them. Maintaining facilities and staffing at a disaster level for long periods of time is unlikely since it would be cost prohibitive for most organizations. At the same time, a scalable response process capable of evolving with a disaster has not been identified by public health practitioners. Overcoming surge capacities and related workforce shortages may require additional funding or more creative resource allocation practices to develop adequate capacity.

Interstate Movement of Commercial Emergency Response Vehicles. During incident response, it is often necessary to deliver response resources across state lines. One concern identified by private sector players in the Oregon venue of TOPOFF 4 was the ability of commercial vehicles involved in emergency response to travel into states in which they are not registered. Currently, the Federal Motor Carrier Safety Administration (FMCSA) may waive certain federal regulations (e.g., limiting hours of service) governing commercial vehicles during

¹²⁶ House Rule X, cl. (1) (m) (6).

¹²⁷ House Rule X, cl. (1) (i) (D).

¹²⁸ CRS Report RS21955, *S.Res. 445: Senate Committee Reorganization for Homeland Security and Intelligence Matters*, by Paul S. Rundquist and Christopher M. Davis. The limitations do not appear to prevent the committee from exercising jurisdiction over Post-Katrina Emergency Management Reform Act provisions underlying the NEP.

¹²⁹ Senate Rule XXV (1) (k) (1) (10).

¹³⁰ For example, the House or Senate Armed Services Committees could look into the activities of DOD in the NEP.

¹³¹ See Katz, Saiti, and McKenzie, "Preparing for the Unknown," p. 946.

emergencies.¹³² State governors may waive certain state regulations governing vehicles traveling in their jurisdictions (e.g., limitations on vehicle length and weight) pursuant to their authorities.¹³³ Federal and state waivers are typically issued for limited periods of time, and apply only to vehicles involved in responding to a state or federally declared emergency. Observers argue that the lack of common vehicle standards from state to state, and the potential need to obtain waivers and proper credentials for vehicles traveling through two or more states en route to an incident, could impair the speed of emergency response.¹³⁴ Congress might consider oversight approaches that could define and address the extent of this potential challenge, or legislative options that could address concerns that are identified.

Exercise Operations

Exercise Realism. While a goal may be to make an FSE as realistic as possible, exercises usually must be run without interrupting routine day-to-day operations¹³⁵ or jeopardizing public safety. Some portions of some exercises must be simulated to replicate the activities, decisions, policies and procedures of entities that are unable to fully participate. While every effort is made to provide a realistic environment in which to exercise, the necessity of simulating certain events or actions, and the incomplete participation of assets that would respond to an actual event, may have an impact on the ability to fully prepare participants, or to plan corrective actions to incorporate into preparedness plans or future exercises. Further, when exercise participants know that they are conducting an exercise, it may be that players do not fully accept the premises of exercise play, or that the exercise experience cannot replicate the stress and confusion that likely would accompany an actual event. A lack of "real-world" connection in an exercise scenario could alter the actions of exercise players. Similarly, an inability to shut down critical infrastructures such as transportation or communications networks, public facilities, or geographic regions during exercise play also may further compromise exercise realism, and consequently, the lessons that might be drawn from them.

Another challenge may be that exercise processes interfere with the preparedness of some participants. This could occur if exercise player are required

¹³² See 49 CFR 390.23. FMCSA waiver information is available at "Disaster Relief Information for Drivers and Motor Carriers," [http://www.fmcsa.dot.gov/emergency/disaster-relief.htm].

¹³³ State-issued waivers are posted on the "Notifications" section of the International Registration Plan website at [http://www.irponline.org/Notifications/].

¹³⁴ McGillivray, Private Sector Working Group, August 29, 2008.

During TOPOFF 4, for example, the Portland, Oregon Fire Bureau maintained full staffing of its facilities. The department paid otherwise off-duty personnel to participate in the exercise, but did not support round the clock exercise play, despite the near certainty that fire assets would provide continuous response in an actual event. The fire bureau was one of several entities that did not participate throughout the exercise. The response of non participating entities was simulated when they were not available. Portland OEM, August 18, 2008; Oregon OEM August 16, 2008; State of Oregon, *TOPOFF-4 after Action Report*, March, 2008, p. 54.

to carry out exercise management or coordination roles that are distinct from their typical preparedness and response duties, or to assume agency leadership roles when principals do not engage in exercise play. Similar concerns were raised by some TOPOFF 4 participants, who noted that media inquiries about the exercise frequently removed senior officials from the exercise. In either case, participants who carry out exercise-specific duties may not have the benefits of exercising their incident response responsibilities. Additionally, when agency leadership roles are simulated, or played by officials who would not lead response to an actual incident, the effectiveness of exercises as tools to enhance preparedness among officials with principal response functions may be questioned.

No-Notice Exercises. Observers note that no-notice exercises "can provide an accurate picture of how well the federal government can both coordinate the actions of its own agencies and work collaboratively with state and local governments in responding to a catastrophe." The Post-Katrina Emergency Management Reform Act requires that all national exercises be "carried out ... with a minimum degree of notice to involved parties regarding the timing and details." ¹³⁹ The NEP implementation plan, however, requires only one no-notice, Tier II federal interagency exercise in each five-year strategic exercise cycle. Since many incidents occur with little or no notice, it is arguable that failing to incorporate the element of surprise into exercise planning could reduce the ability of response officials to carry out exercises under more realistic conditions, or to deploy response resources in a complex and dynamic incident. The inherent challenges to initiating resourceintensive, government-wide exercises such as NLEs, however, lead many observers to argue that no-notice provisions cannot be met due to the scale of an NLE and the extensive staff support required from participating entities over a period of many months. In particular, state, territorial, local, and tribal entities that wish to participate in an NLE must allocate resources through their respective budget processes well in advance of their participation, or risk disrupting the regular duties of available first responders. 140 Congress might examine the issue of no-notice exercise training, in an effort to balance the demands of effective emergency preparedness training on the one hand, and the challenges raised by incorporating non-federal participants into broader exercise programs on the other.

Scale and Scope of Exercises. Related to the issue of realism is the scale and scope of preparedness exercises. Some observers of the TOPOFF exercise series claim that while the exercises provided useful insights and opportunities to improve response plans, the scale, level of attention, and the costs of the exercises were

¹³⁶ Portland OEM, August 18, 2008.

¹³⁷ Based in part on comments made during the Eagle Horizon 08 (NLE 2-08 continuity component) After Action Conference, June 17, 2008.

¹³⁸ Christine E. Wormuth and Anne Witkowsky, *Managing the Next Domestic Catastrophe*, p. 62.

¹³⁹ Post Katrina Act, sec. 648(b)(2)(iii).

¹⁴⁰ OSD briefing July 23, 2008; NGB briefing August 5, 2008; Portland OEM, August 18, 2008; and Oregon OEM August 16, 2008.

excessive.¹⁴¹ Some Oregon venue participants spent more that two years on TOPOFF 4 from initial planning through the preparation of AARs and implementation of improvement plans. Focusing on the FSE, one exercise participant said

we believe exercises can be more effective when they are designed to meet more focused objectives, targeted toward fewer participants, and shorter in duration. Government seems to believe that exercises must include everyone and take at least a week to conduct. We realize there may be benefits from being all-inclusive but the result is less effective training than might be achieved through more frequent, smaller exercises that are focused on specific groups.... This allows for the development of an exercise with a realistic scenario that maximizes the value for the exercise participants. 142

Concerns have also been expressed that exercise scenarios have been adapted to allow some federal participants a place to participate within an exercise, with little clear connection between their response capability and the stated goals, or underlying scenario, of the exercise. Similar concerns could be raised about the NEP in general, and NLEs in particular.

Exercise Fatigue. The NEP was developed in part to address the challenge of "exercise fatigue." Exercise fatigue is said to occur when multiple exercises require ongoing demands on an entity's limited time and resources. The NEP implementation plan argues that the fatigue factor is exacerbated when exercise activities do not contribute to appreciable improvements in intergovernmental coordination, exercise policies, plans, or emergency response performance. 144 Exercise fatigue may also be complicated by the perception that some of the 15 National Planning Scenarios, which arguably have a relatively low likelihood of occurring, may receive more attention than scenarios based on events that occur with greater frequency, but that are arguably less sensational. TOPOFF 4 participants noted that the exercise scenario involving the explosion of a radiological dispersion device (RDD) in the Portland, Oregon area was unrealistic, and that floods, such as those experienced in Oregon after the TOPOFF 4 FSE, are more likely to necessitate emergency response. The transition from the TOPOFF series, which Congress required to focus on terrorism, to NLEs based on the NPS, 145 which incorporates all hazards, may address some of these concerns. On the other hand, it could be argued that preparedness training for less likely scenarios is necessary to build public confidence, or due to the potential scope of disruption, and the high economic, social, and political costs of not preparing if an incident were to occur.

Some observers and preparedness officials, focusing on the process of exercise development, argue that exercises and the underlying scenarios may not be as valuable as the planning process in which an exercise is developed. Observers assert

¹⁴¹ McGillivray, Private Sector Working Group, August 29, 2008.

¹⁴² Underhill, AT&T email, August 19, 2008.

¹⁴³ Portland OEM, August 18, 2008; and ATF briefing, August 15, 2008.

¹⁴⁴ NEP implementation plan, p. 1.

¹⁴⁵ Portland OEM, August 18, 2008; and Oregon OEM August 16, 2008.

that this is due in part to behavior during an incident when "crisis plans rarely occupy centre stage in the heat of the moment." During the planning phase of an exercise, preparedness officials assert that exercise participants may receive technical assistance, critically examine their plans, or interact with other entities to develop exercise response operations, which could contribute to preparedness, ¹⁴⁷ although the extent of that contribution may be questionable if communications processes among exercise participants are problematic.

Some have raised concerns that exercise scenarios based on relatively low-likelihood incidents may overprepare responders for incidents that are rare, or have never actually occurred, while underpreparing responders for more frequently occurring events. At the same time, while there are likely differences in the substantive response to an improvised nuclear device (IND), or other WMD, they are also likely to require some of the same target capabilities as those required to respond to a cyber attack, or natural disaster. As the NEP is more fully implemented, Congress might consider the extent to which the NEP has incorporated the "all-hazards" orientation of the Post-Katrina Emergency Management Reform Act into its exercise schedule.

Evaluating Exercises. Exercises are designed in part to demonstrate capabilities and to reveal areas of deficiency in emergency response. In some military exercises, capabilities may be demonstrated, or deficiencies identified, by "exercising to failure," 150 or thoroughly practicing a particular response until all of its weaknesses are identified. While most civilian exercises are designed to test and demonstrate response capabilities, they do not incorporate exercise to failure, despite Post-Katrina Emergency Management Reform Act requirements that some exercises be designed to stress the NPS. The identification of capabilities on which to build or deficiencies through an evaluation process and the publication of some findings through a public AAR, as required by the HSEEP method, may raise challenges if exercise participants have not adequately exercised their plans, or are concerned about potential consequences as a result of negative evaluations. As a result, there may be incentives for some exercise planners to understate exercise objectives, overstate the extent to which those objectives are met, or to downplay or omit deficiencies that are identified. Any of those approaches arguably undermines the effectiveness of exercises as tools to prepare for an incident, or to evaluate an entity's capacity to respond to an incident. Congress might inquire if omissions are occurring

¹⁴⁶ Arjen Boin, Paul 't Hart, Eric Stern and Bengt Sundelius, *The Politics of Crisis Management: Public Leadership Under Pressure* (Cambridge: Cambridge University Press, 2005), p.146-148.

¹⁴⁷ DHS/FEMA briefing, June 12, 2008.

¹⁴⁸ ATF briefing, August 15, 2008.

¹⁴⁹ For example, it is likely that the response to a WMD or natural disaster incident would include first responder services from police, fires, and emergency medical resources. Other target capabilities that may be somewhat scenario neutral include law enforcement and investigation, prevention, medical services, securing the scene of an incident, intelligence sharing, and communications to the public.

¹⁵⁰ NGB briefing, August 5, 2008.

in the exercise evaluation process, and the purposes of such omissions if they are occurring.

Another area of potential concern is the nature of the exercise evaluation process. The HSEEP method does not provide common benchmarks or metrics to apply in the evaluation of an exercise. Moreover, under the HSEEP method, exercises are typically evaluated by the same group that designs the exercise. This approach, which extends beyond the NEP to any entity that uses the HSEEP method, may be problematic if the evaluators fail to critically assess their own program. Congress might inquire if self-evaluations inhibit the evaluator's objectivity toward the exercise, or whether exercises may need to be rigorously evaluated through an external, independent evaluation process to gain more accurate insight into response capabilities and deficiencies. Given the specialized nature of exercise development, it is unclear whether qualified external evaluators would be readily available to every entity that exercises.

It could be argued that the public dissemination of deficiencies through the AAR process or the use of external evaluation may inform adversaries of potential vulnerabilities. If that is the case, then Congress could consider methods to secure exercise information and restrict its distribution to appropriate recipients. A model of tiered distribution has been used by DHS to provide TOPOFF 4 after action materials. This includes three separate "quick look" AARs, including versions for the public, 152 participants, and the broader responder community. A final draft AAR, which will be provided to the head of a participating entity, has not been released at the time of this writing. The current approach may have limited utility as a means of communication: some state and local TOPOFF 4 participants, who developed their own AARs, have not been provided with draft or final copies of the participant version. The lack of access to exercise review materials could impair the effectiveness of the HSEEP method evaluation process and create challenges for exercise participants who wish to incorporate broad feedback into their exercise improvement programs.

Relatedly, Congress might question the extent to which deficiencies identified in exercises are addressed, and whether corrective actions are integrated into emergency management planning documents and processes. For example, it has been reported that a hurricane preparedness exercise known as "Hurricane Pam" held in July 2004 identified many of the problems that occurred when Hurricane Katrina struck New Orleans in August 2005. Despite the exercise findings, emergency

¹⁵¹ Zack Phillips, Disaster Drills: Practice Doesn't Make Perfect," *Government Executive*, November 1, 2006, p. 36.

¹⁵² Department of Homeland Security *Top Officials 4 (TOPOFF 4) Full-scale Exercise (FSE), After Action Quick Look Report,* November 19, 2007, available at [http://www.fema.gov/pdf/media/2008/t4_after%20action_report.pdf].

¹⁵³ Some of the challenges included difficulties organizing a mass evacuation, and providing services to those who remained in the area affected by the storm. See U.S. Congress, Senate, Committee on Homeland Security and Governmental Affairs, *Hurricane Katrina: A Nation Still Unprepared*, 109th Cong.,, 2nd sess., S.Rept. 109-322 (Washington: GPO, (continued...)

managers reportedly failed to incorporate exercise experiences into response plans.¹⁵⁴ On the other hand, emergency management officials have argued that they did not have sufficient funding to implement any of the findings from the Hurricane Pam exercise into standing response plans.¹⁵⁵ Congress might inquire as to the extent to which the findings derived from exercises are being assimilated into emergency planning and the nature and extent of impediments to such actions.

How "National" Is the NEP? The development of the NEP framework appears to have brought DHS and DOD exercise planning and synchronization assets together to establish a common, or at least collaborative, exercise scheduling process. Exercise information relating to other agencies that staff the NEP executive steering committee has not been identified. While this precludes their evaluation, their participation in the DRG E&E Sub-PCC suggests an awareness of exercise planning matters. It is unclear how information and expectations are communicated to federal agencies that do not participate in the processes described in the NEP implementation plan. As discussed above, the lack of a clear connection between the NEP and state, territorial, local, and tribal government exercise programs may also raise questions about the reach of the program.

NEP Opportunity Costs for Existing Agency Exercise Activities. In various NEP presentations in 2006 and 2007, it was indicated that agency-level exercise programs that do not necessarily fall under the NEP framework would continue. The NEP charter asserts that the program shall not replace existing federal executive agency exercise programs, but may incorporate agency-specific exercises as needed. The NEP implementation plan, issued in 2008, however, appears to provide ambiguous, potentially confusing guidance: "...NEP is intended to provide a framework for prioritizing and focusing Federal exercise activities, without replacing any individual department or agency exercise program"; "...NEP incorporates HSEEP [exercise program] as well as other department and agency exercise programs..."; and "[a]ll departments and agencies shall have an have an exercise participation decision process that accords priority to NEP Tier I and Tier

^{153 (...}continued)

^{2006),} available at [http://www.gpoaccess.gov/serialset/creports/katrinanation.html].

¹⁵⁴ Zack Phillips, Disaster Drills: Practice Doesn't Make Perfect," *Government Executive*, November 1, 2006 p. 36.

¹⁵⁵ See testimony of Michael D. Brown, former Undersecretary of Emergency Response and Preparedness and FEMA Director, DHS before the Senate Committee on Homeland Security an Governmental Affairs hearing, *Hurricane Katrina: the Roles of the Department of Homeland Security and Federal Emergency Management Agency Leadership*, February 10, 2006, retrieved through nexis.com

¹⁵⁶ See Department of Homeland Security, "National Exercise Program," presentation at the DOD Worldwide Joint Training and Scheduling Conference 2007-1 (WJTSC 07-1), Mar. 8, 2007; and Department of Defense, Joint Staff, "Exercise Synchronization Working Group," presentation at the DOD Worldwide Joint Training and Scheduling Conference 2006-2 (WJTSC 06-1), Oct. 2, 2006. Both presentations are available from the authors upon request.

¹⁵⁷ NEP charter, p. 4.

II events." The NEP implementation plan does not specify what "other department and agency exercise programs" are incorporated. Consequently, the effect, if any, it will have on agencies' abilities to conduct exercises in addition to their NEP responsibilities cannot be determined.

A possible consequence of mandating agency participation in the NEP is that existing agency exercise programs may need to shift the focus of their activities to internal exercises that prepare an agency to participate in NEP exercises. This preparation may come at the cost of other exercise activities that an agency may be required to complete, or otherwise deem important, but that either do not fall within the purview of the NEP, or that are not exercised regularly through an NLE. This may be of particular concern in two instances at the federal level. In the first instance, some agencies may not integrate emergency response training and exercise preparation into their day-to-day activities. If they are not included in NEP activities, their capacity to respond to an incident may be impaired. In the second instance, agencies with emergency support function (ESF)¹⁵⁹ responsibility may be limited in their ability to exercise with interagency partners because their Tier II exercise nominations are not incorporated into the NEP, or the exercise scenario for an NLE does not necessitate a response in their area of ESF responsibility.

A potential consequence might be that while the NEP establishes a government-wide exercise program, the combination of limited government-wide exercises, potential resource transfer from other preparedness or exercise programs to meet NEP requirements, and the use of exercise scenarios for which some agencies have no responsibility could result in a reduction in the opportunity for some agencies to exercise all of their preparedness and response roles in a manner that could better ensures an effective response to an incident.

¹⁵⁸ Quotes taken from NEP implementation plan, pp. 2, 3, and 17.

¹⁵⁹ According to FEMA, ESFs provide structure for coordinating federal interagency support for a federal response to an incident. They are mechanisms for grouping functions most frequently used to provide federal support to states and federal-to-federal support, both for declared disasters and emergencies. ESFs include (1) transportation; (2) communications; (3) public works and engineering; (4) firefighting; (5) emergency management; (6) mass care, emergency assistance, housing, and human services; (7) logistics management and resource support; (8) public health and medical services; (9) search and rescue; (10) oil and hazardous materials response; (11) agriculture and natural resources; (12) energy; (13) public safety and security; (14) long-term community recovery; and (15) external affairs. For each ESF, one federal agency is assigned as coordinator with management oversight. One or more agencies with significant authorities, roles, resources, or capabilities for a particular function within an ESF may serve as a primary agency. Other agencies with specific capabilities or resources that support the primary agency in executing the mission of the ESF are assigned as support agencies. See FEMA, Emergency Support Function Annexes: Introduction, available at [http://www.fema.gov/pdf/emergency/nrf/ nrf-esf-intro.pdf].

Appendix A. National Level Preparedness Exercise Mandates

This appendix classifies legislative and executive mandates to conduct National level preparedness exercises based upon their level of specificity. Those provisions explicitly mandating *National level* preparedness training exercises, or exercises of a similar magnitude, are listed in **Table 1**. Provisions that require the conduct of homeland security or other preparedness exercises, but do not explicitly require such exercises to be conducted on a National level are listed in **Table 2**.

Table 1. Express Mandates to Conduct "National Level Preparedness Exercises"

Citation	Description
6 U.S.C. § 317(c)(3)(B)	Requires the Administrator of FEMA to require each Regional Administrator to participate as appropriate in regional and national exercises.
6 U.S.C. § 748(b)(3)	Requires the Administrator of FEMA to perform national exercises, at least biennially, to test and evaluate the capability of federal, state, local, and tribal governments to detect, disrupt, and prevent threatened or actual catastrophic acts of terrorism, especially those involving weapons of mass destruction.
6 U.S.C. § 764	Requires the President to establish a national exercise simulation center that uses a mix of live, virtual, and constructive simulations to prepare elected officials, emergency managers, emergency response providers, and emergency support providers at all levels of government.
42 U.S.C. § 300hh- 11(a)(3)(c)	Requires the Secretary of HHS to conduct an initial test of the National Disaster Medical System and subsequent periodic tests as the Secretary deems appropriate.
Exec. Order No. 12656 §§ 104(e), 1701(9)	Establishes a national security emergency exercise program and requires the support of the heads of all appropriate federal departments and agencies. Also directs FEMA to coordinate the planning, conduct, and evaluation of national security emergency exercises.

¹⁶⁰ Only provisions that continue to require the conduct of preparedness exercises are included in this appendix. Provisions that exclusively applied to specific exercise events that have already taken place, such as TOPOFF 2000 and TOPOFF 2, are not listed here.

Citation	Description
Homeland Security Presidential Directive 8 § (18)	Directs the Secretary of DHS, in coordination with other appropriate federal departments and agencies, to establish a national program and a multi-year planning system to conduct homeland security preparedness-related exercises. Also directs all federal departments and agencies that conduct national homeland security preparedness-related exercises to participate in a collaborative, interagency process to designate such exercises on a consensus basis and create a master exercise calendar.
Homeland Security Presidential Directive 21 § (23)(a)(ii)	Directs the Secretary of HHS to establish standards and performance measures for state and local government countermeasure distribution systems, including demonstration of specific capabilities in tactical exercises in accordance with the National Exercise Program.
National Security Presidential Directive 51 § (16)(e)	Directs the Secretary of DHS to develop, lead, and conduct a federal continuity training and exercise program, which shall be incorporated into the National Exercise Program developed pursuant to Homeland Security Presidential Directive-8.

Table 2. General Mandates to Conduct Exercises

Citation	Description
6 U.S.C. § 124h(b)(3)-(11)	Requires the Secretary of DHS to conduct tabletop and live training exercises to regularly assess the capability of individual and regional networks of state, local, and regional fusion centers to integrate the efforts of such networks with the efforts of DHS.
6 U.S.C. § 313(b)(2)(G)	Requires the Administrator of FEMA to provide training and exercises necessary to respond to a natural disaster, act of terrorism, or other man-made disaster.
6 U.S.C. § 314(a)(2)	With respect to the Nuclear Incident Response Team, requires the Administrator of FEMA to conduct joint exercises and provide funding to the Department of Energy or the Environmental Protection Agency for homeland security training and exercises.

Citation	Description
6 U.S.C. § 612(a)(4)(A)	Requires the Administrator of FEMA to ensure that states and high-risk urban areas that receive grants administered by DHS conduct or participate in exercises under section 648(b) of the Post-Katrina Act of 2006 [6 U.S.C. § 748(b)].
6 U.S.C. § 753(a)(1)(B)	Requires the President to ensure that each federal agency with responsibilities under the National Response Plan has organizational structures that are assigned, trained, and exercised for the missions of the agency.
6 U.S.C. § 753(a)(3)	Requires the President to ensure that each federal agency with responsibilities under the National Response Plan develops, trains, and exercises rosters of response personnel to be deployed when the agency is called upon to support a federal response.
6 U.S.C. § 913	Directs the Secretary of the Department in which the Coast Guard is operating to require each high risk facility to conduct live or full-scale exercises described in 33 C.F.R. § 105.220(c) not less frequently than once every 2 years.
6 U.S.C. § 1137(c)(7)	Requires the Secretary of DHS to develop and issue regulations for a public transportation security training program, that will include, among other things, live situational training exercises regarding various threat conditions, including tunnel evacuation procedures.
6 U.S.C. § 1167(c)(8)	Requires the Secretary of DHS to develop and issue regulations for a railroad security training program, that will include, among other things, live situational training exercises regarding various threat conditions, including tunnel evacuation procedures.
6 U.S.C. § 1184(c)(8)	Requires the Secretary of DHS to develop and issue regulations for an over-the-road bus security training program, that will include, among other things, live situational training exercises regarding various threat conditions, including tunnel evacuation procedures.

Citation	Description
49 U.S.C. § 44918(a)(2)(G)	Requires each air carrier providing scheduled passenger air transportation to carry out a training program for flight and cabin crew members to prepare the crew members for potential threat conditions, including situational training exercises regarding various threat conditions.
50 U.S.C. § 2315(a)(2)	Requires the Secretary of Homeland Security to develop and carry out a program for testing and improving the responses of federal, state, and local agencies to emergencies involving nuclear, radiological, biological, and chemical weapons and related materials. The program shall include exercises to be carried out in accordance with sections 102(c) and 430(c)(1) of the Homeland Security Act of 2002 [6 U.S.C. §§ 112(c), 238(c)(1)].

Appendix B. Acronym Glossary

Acronym	Term
AAR	After Action Report
APHS/CT	Assistant to the President for Homeland Security and Counterterrorism
APNSA	Assistant to the President for National Security Affairs
ATF	Bureau of Alcohol, Tobacco, Firearms and Explosives
CAP	Corrective Action Plan
CBRNE	Chemical, Biological, Radiological, and Nuclear Explosives
СЕР	Chairman (Of the Joint Chiefs of Staff) Exercise Program
CFR	Code of Federal Regulations
CJCS	Chairman of the Joint Chiefs of Staff
CJCSI	Chairman of the Joint Chiefs of Staff Instruction
CJCSM	Chairman of the Joint Chiefs of Staff Manual
COOP	Continuity of Operations
CPX	Command Post Exercise
CRAF	Civil Reserve Air Fleet
CRS	Congressional Research Service
DHS	Department of Homeland Security
DNI	Director of National Intelligence
DOD	Department of Defense
DOJ	Department of Justice
DRG E&E Sub-PCC	White House Domestic Response Group, Exercise and Evaluation Policy Coordinating Subcommittee
DSCA	Defense Support to Civil Authorities
EEG	Exercise Evaluation Guides
EOC	Emergency Operations Center (used generically)
ESC	Executive Steering Committee

Acronym	Term
ESF	Emergency support Function
FE	Functional Exercise
FE	Functional Exercise
FEMA	Federal Emergency Management Agency
FMCSA	Federal Motor Carrier Safety Administration
FOUO	For Official Use Only
FR	Federal Register
FSE	Full Scale Exercise
HHS	Department of Health and Human Services
HSC	Homeland Security Council
HSEEP method	Homeland Security Exercise and Evaluation Program. Exercise design, development, conduct, evaluation, and improvement planning methodology.
HSGAC	Senate Committee on Homeland Security and Governmental Affairs
HSGP	Homeland Security Grant Program
HSPD	Homeland Security Presidential Directive
IED	Improvised Explosive Device
IND	Improvised Nuclear Device
IP	Improvement Plan
J7	Joint Chiefs of Staff Operational Plans and Joint Force Development directorate
JCS	Joint Chiefs of Staff
JEP	Joint Exercise Program
JFO	Joint Field Office
JLLIS	Joint Lessons Learned Program, DOD
JWFC	Joint Warfighting Center
LLIS	Lessons Learned Information Sharing, [https://www.llis.dhs.gov]
MOU	Memorandum of Understanding

Acronym	Term
NCC	National Coordinating Center for Telecommunications
NCP	National Continuity Programs
NCR	National Capital Region
NCS	National Communications System
NEP	National Exercise Program
NEXS	National Exercise Schedule
NGB	National Guard Bureau, DOD
NGO	Nongovernmental Organization
NGO	Nongovernmental Organization
NIC	National Integration Center, FEMA
NIMS	National Incident Management System
NLE	National Level Exercise
NOC	National Operations Center
NORAD	North American Aerospace Defense Command
NPG	National Preparedness Guidelines
NPS	National Planning Scenarios
NRF	National Response Framework
NRP	National Response Plan (superseded by NRF)
NSC	National Security Council
NSPD	National Security Presidential Directive
OEM	Office of Emergency Management (used generically)
OGR	House of Representatives Committee on Oversight and Government Reform
OMB	Office of Management and Budget
OSD	Office of the Secretary of Defense
PI	Pandemic Influenza
PLE	Principal Level Exercise
POC	Point of Contact

Acronym	Term
RDD	Radiological Dispersal Device
RDD	Radiological Dispersal Device
REP	Radiological Emergency Preparedness Exercise
TCL	Target Capabilities List
TOPOFF	Top Officials Exercises
TTX	Table Top Exercise
UASI	Urban Area Security Initiative
USAF	United States Air Force
USG	U.S. Government
USNORTHCOM	U.S. Northern Command
USTRANSCOM	U.S. Transportation Command
UTL	Universal Task List
WJTSC	World Wide Joint Training and Scheduling Conference
WMD	Weapon of Mass Destruction